

gagcttttga ggttttagat tcagctaaac gtgggtttct tactaaggac gagctgatca 300
 agtatatgac tgaagaagat ggagtttcgc tccgtcgccc aggctgaagt gcagtggcgt 360
 gatcttggct cgttgcaacc tccacctccc gggttcaaga gattctcctg cctcagcctc 420
 ctgagcagct gggatgacag gcacactcca ccacgcctgg ctaatttctg tatttttagt 480
 agagacgggg tttcaccatg gtctgggtgac ctcttggtct cgaactcctg acctcaagtg 540
 atctctccgc ctcagcctcc caaaattctg ggattncagg catgagccac cgcacccggc 600
 tgcttcccta actcttgatc tctctctgt atcttgcttt gtctagctgt tctcttctct 660
 ccatattcat ccanacattt gcttagaant ncccngaanc ctgggcgggtt gaatgttggt 720

<210> 2673

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2673

cgataatgac tttgcacgat tcactttggg atctcaaagt gcttccaaag cattcagatt 60
 tacaacaat tcacaagaca ggtcatcttt gtaataccca tacttacaac gaattaacaa 120
 gaggagtgac ttaagattct ccaggaacac agtggcagct attgatgac tgttttctat 180
 ctgtttgata gagcatcatg agaaatcaca aaatacaatg ctatttttct gatgtgtgct 240
 aataaagtca aagaaagcaa atacatcttg acacttttgt ccattttcat taaaaaaaaa 300
 aaaaagttca ggggtgttgg aattttacac ctcagcacac cttactggta tcaatggata 360
 aagcgggtaa ttgacagatc caccctaatg ccactgcagt cagaagcaga tctggacaca 420
 cccttgttta cagtttcata ttgggttgct atagttcccg tgctaaatca ccagctttca 480
 ggaacatgac tgctcctggc agtggaagggt gctgaaacag aaattttaat taaaaacttt 540
 atcaagtact cttcacagtg ctgcttggca ccatanaaaa tcagtacaat atatcgagcc 600
 ctactttgga nganctggat ttctgaagga gctgatccag ttctaantgt cttctcnaat 660
 taggagata 669

<210> 2674

<211> 697

<212> DNA

<213> Homo sapiens

<400> 2674

```

gtagataatg cataagaagc accaagtcag gctcagatgc aactaaaaca catctttgag   60
cctttttctt ttcctttctc ccctttctaa gcaaaaacct tcctaggatg gcatcttttg  120
ctctaactgg gagacagtca taattggttg tagtcaattc tactaagcag tgttgggggtg  180
gttggaagt ctcttttttg taatttggtt ttgcaaatca ttgtgaggcc actttttctt  240
tctttctttc tttctttctt tctttctttc gttctttcgt tctttcgttc tttctttctt  300
tctttctttc tctttctttc ttttgctttc cttctttcat ctcttttttg taatttggtg  360
ttgcaaatca ttgtgaggcc actttttctt ccccttcctt ccttcctttt tttctgtttt  420
tttttttttt tttcccanan tcttgctctg tcgccaggt tggagtgcag tggcacgac  480
tcggctcact gcaccctctg cctcttgggt tcaagcgatt ctctgcctc agcctcccaa  540
gtagctggga ttacaggcat acaccaccac gcccactaa tttttgtat ttttggtang  600
gggggggttc accatgatgg ccangttggt tttgaactcc tgaactcaag tnatctgcc  660
acctcgggnc tcccaaantg ccaaggaatt acaggaa                               697

```

<210> 2675

<211> 627

<212> DNA

<213> Homo sapiens

<400> 2675

```

tttcacctca gcaaggccag gggatctgca cgttgtgtta gacatggcta aagtagctga   60
taccatcctg ttctccttg atccactaga aggctgggac agcaccggtg attactgtct  120
ttctgcctc tttgctcagg gccttccgac ctatacacta gctgtccagg ggatttctgg  180
cctcccactg aagaaacaaa tagataccag gaagaagcta agtaaagcag tggagaagcg  240
ctttccgcat gacaaactcc tcttggttaga cactcaacag gaggcaggga tgctgcttan  300

```


gcagttggct aaccagaagc aacagcatct tgcttttcga gatcggcggg cctacctatt 360
 tgcccatgct gttgattttg ttcctagtga ananaataac ttggtgggca ccttgaaaat 420
 ttcaggctat gttcgagggc anactctgaa tgtcaatang ttgctgcata tcgttgata 480
 tgggtgatttc cagatgaaac agatagatgc ccccgagac cttttccctt taaatcctag 540
 angaattaaa ccccaaaagg acccanacat ggcaatggan atttgtgcta cgggatgctg 600
 ttnatgatat gggaagaang tcttaaa 627

<210> 2676

<211> 799

<212> DNA

<213> Homo sapiens

<400> 2676

aaatccttcc ttccccgggg tagaagtcca gggtgagaaa ttggttccga actcaaagga 60
 acccagtgcc gggccacagc cgggtcacgt ggccggcggc ccccatgac gtgctggctg 120
 cggggcgctca cggcgacgtt cgggcgacct gccgagtggc caggctacct cagtcacctg 180
 tgttggtcgca gtgctgccat ggacctggga cccatgcgca agagttaccg cggggaccga 240
 gaggcatttg aggagactca tctgacctcc cttgaccag tgaaacagtt tgctgcctgg 300
 tttgaggagg ctgttcagtg tctgacata ngggaagcca atgccatgtg tctggctacc 360
 tgcaccagan atggaaaacc ctctgctcgc atgttgctgc tgaagggtt cgggaaagat 420
 ggcttccgct tcttactaa cttcgagagt cnaaaaggaa aagactggac tctaatecct 480
 ttgcttccct tgtctttctac tggganccac ttaaccgtca ggtgcgtgtg gaaggcctgt 540
 gaanaaactg cctgaagaag aagctgaatg ctacttcac tcccggccca agaacaccan 600
 attggggctg tggtcaccac canaattctg tnatccctga tcgggaattt ctgaaaaaan 660
 aaaaatgaag aactggaaca ctctaccag aatcaanaag ttgccc aan cccaaaatcc 720
 ctgggggttg gtnattttcc tgttcccccc cggttnatgg aattcctggg caaggtccaa 780
 acccaaccn ccctgcntt 799

<210> 2677

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2677

```

agagcatccc cggagcatct taagagctga gcgcagctga caactagggg ccggaccgtc   60
gcaggaggcg tccgctggat accttcccc ttccctgacc tagagctcta cagctgctgc  120
ctcggtactg accgagggtt cccagagctg tctcaccatt gcaaaaacgt tatagcaaca  180
gcctctgatt acgacatggc tgagatcacc aatatccgac ctagctttga tgtgtcaccg  240
gtggtggccg gcctcatcgg ggcctctgtg ctggtggtgt gtgtctcggg gaccgtcttt  300
gtctggtcat gctgccacca gcaggcagag aagaagcaca agagcccacc atacaagttt  360
attcacatgc tcaaaggcat cagcatatac ccagagaccc tcagcaacaa gaagaaaatc  420
atcnaagtgc ggagagacaa anatggtcct gggagggaan gtggacntan gaacctgttg  480
gtggacgca                                     489
    
```

<210> 2678

<211> 768

<212> DNA

<213> Homo sapiens

<400> 2678

```

atgtaanatg tgtgacatct tatcctgtgg catgctgagc accgacagcc tctgaagccc   60
aactcaacc aggacacaca tgctccctgc tcttgggggt gacctggggt ttatggagtc  120
agtgtgcttg ctcacaaacc tctttatgcc aattgcactg gttatcagaa ttatgtaatt  180
taatgaaata gtaccaaata tttcataaac taattaaata tgactacata aaggtcactg  240
cttctttgaa agttcactat ttggaagaa actcaaaatt agtcactaca gaagcatttc  300
tgtcaatgta aatgtgttat gataactata aaaggcgagg gggaatatta taaaatctaa  360
gaggattcta ctcttcataa gcatcttcag ctccgctgac ttcaaagaaa ctagactgga  420
aatcanacct tgttattgga gtgagttgta aaagaaagtc tacatggaat tccaatgggt  480
    
```

agatccttat tcagagaact atttgtgcct catcacaggt tagaccggca tgttttgcca 540
 caatagctgc gagttcaaaa tgttgtaagg tctcgtttat gttttatgta tttcnntatg 600
 tattgtnttc caaaaggatt ttctgcttta atcagctttt accatttaat ttgccttagg 660
 gcctggaatt atgttcagat gaanaaagga tttgggccgt tattaaaact naacanccac 720
 cnccttaaaa aaaaggaaaa agttttttcc cntttggttt ttaaaaag 768

<210> 2679

<211> 858

<212> DNA

<213> Homo sapiens

<400> 2679

agctgggtcg cggcgtctcg ctccggtcgg gaggactgag gacagccccg cctccgcccc 60
 ctgggtcaag cccggttcc ttttcagttc gtccatcttc tanaaacgag tccccgagac 120
 cccgggctgc ctcttgggg ctgctccgcc tcctgaccag ccctcgtcag ccactcgaag 180
 tccctgagga gacgtggaga ggaggaggga cacggcatgg ggggagtcg ggaagggaga 240
 cgagcgtctg aagacgtcct cccgagggca gaaggggccg ggggagctgg cgcanggctc 300
 tctacctatc gctgcaggt cctgggcgat tgtancggga ccgtcacaca caactggcac 360
 ccaggccagg ggtccagagc taaattctgc ctgcaggagc ggttattgtg gcatccgttt 420
 ctaaaaagtt taaaggcaac attttatttt attttaattt ttttgagaca agatctgcct 480
 ctgtcgccca ggctggagtg cagtggcgag atctcagctc acttgcaacc tgtgcctccc 540
 ggcttcaagc gattctcagc ctcagcctcc cgagtagctg ggattgcang cggccggcac 600
 cacgcccggc taattttttt nttttttctt tcngttttgt ttgaaactca ntctcgctct 660
 gtttgcccaa gctgaaatnc agtgggggcg ctctcggtc ncttgcaaac ctctgcctcc 720
 caaggtttca aagcnattct ccttgccctcc agcctcccc gaattacctg gggaatttnc 780
 agggaaccgt tgccccccc ctcccgggt taaanttttt gntttttttt aaagtttnaa 840
 aaattggggg tttncccc 858

<210> 2680

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2680

```

tttgctgagg ctgttaactt ctgcactgtt gattggctgc cattaggccg acagtgtgtg   60
gagcattatc gcttgcttca tcgatattgt gtgttttccc atgatgagat gatctgcaag  120
atggcttcca aggctgatgt attagatggt gtagtggctt caactgttca gaaagacatg  180
gccattatga ttgaggatga gaaagcttta agagaaactg tccgtaaatt gggagtgatt  240
gattcggaaa gaatggattt tgagctgttg ccagatgatg aacgtcagtg tgttaaagtc  300
aaaactacat gcttcatgtc tgccatctcc tgttcttgta aacctggcct tcttgtttgc  360
ctgcatcatg taaaanaatt gtgttccctgt cctccttata aatataaatt gcggtatang  420
tacacnctgg atgatctcta ccctatgatg aatgcattga agcttccaac canaatctta  480
caaccaaagtg ggccttgaat gtgaatgaag ctttggaggc aaacatcnac canaanaaaa  540
ccttgtcn                                     548
    
```

<210> 2681

<211> 529

<212> DNA

<213> Homo sapiens

<400> 2681

```

gggagcgggg cggcgggcgc cggggctggc atggcgtggc cctgtatcag ccgcctgtgc   60
tgcctggcgc ggcgctggaa ccagctggac cgctccgacg tggcgggtgcc gctcactctg  120
cacggctact cggacctga cagcaggagg ccgggcacgg gcggcgccgc ctcgcgcagg  180
ggccagcctc ccgcgggcgc ccgggattcc ggccgggacg tgccgctcac tcagtaccag  240
cgggacttcg gcttgtggac cagccccgcc gggcccaagg atccgccgcc ggggcgcgga  300
ccgggggdcg gcggccgcag gggcaaattc tccgcgcagt cctccgcgcc acctgcgcc  360
ggcgcccgcg ggtctacgt tctgcccatc cgcgacacgg acgcagctgc agcagtgacc  420
    
```

acgtcgtaca gacaggaatt ccaggcttgg actggaatga aaccctccag atccacnaag 480
acggaanccn cccgaatcat cacaaccac acttccgat tggacaaca 529

<210> 2682

<211> 505

<212> DNA

<213> Homo sapiens

<400> 2682

agttctncag gggtaggga tggaangact tttttggcaa tgatggaaat gagatgtctg 60
caggaagatg ggatttaca agaatagga aatgtttatc attgaccata caaagctggc 120
ttatcttact tgtagaagag tgtttggcag ctgaaacca agggaaagaa aggaattgcg 180
tcattatagg caattcaggc taaatattat actacgtact ccatataccc tctttttgt 240
ttttgcccc aacaaagaga aggggtcttg ctctgtcacc cagtctggag tgcagtggct 300
aatcatggc tcaactgcagc ctgcacctcc tgggcacaag tgatcctccc atctctgcct 360
tgaatagctg ggactccagg tgcacgccac aatgcctaata ttcctagttn ttgtgnaaca 420
cagggctctg ctgtgtagcc caggttggtt tcaacctcct ggctcaagt gatcctcttg 480
cctcagctc ccaaatatcc tctac 505

<210> 2683

<211> 571

<212> DNA

<213> Homo sapiens

<400> 2683

gtcacgtgtc cccccgcgg ggggcggccc ttgaggcgcg cgcttccggt cggcgggagc 60
ctggtggccg cagcggcggt ggcgacgacg gccgagacgt ggggatggcg ggcgccggga 120
gcgaatcccg gttcgccggg ctgtcgctgg tgcagctcaa cgagctgctg gaggacgagg 180
gccagctgac ggagatggtg cagaagatgg aggagacact naatgttcag cttacaaag 240

aatgacact tgccagcaac cggagcctgg cagaaagaaa ccttttgtac cagccccagc 300
 tggacacgtt gaaagcacgc ttgaccaga aataccagga actccaggtt ctctttgaag 360
 cctatcagat aaagaatacc aaattagaca gacagtctag cagtgcctcc ttggagaccc 420
 tgttatcact tcttcacgca caaggggcca agattgagga cgacactgag aacatggcag 480
 agaatttctg gatggagaac ttcctctgga ttccttcatt gatgtctttc agagcaaacg 540
 ganactgncc cacatgcnac ggggtgaaaat c 571

<210> 2684

<211> 567

<212> DNA

<213> Homo sapiens

<400> 2684

aataacaatg gaacatatga tggatttgca tattttgagt gcaaagaaaa gcatggtatt 60
 tttgctcctc ctcaaaaaat atctcacatt ccagaaaact ttgatgacta ttagacatt 120
 aatgaagatg aagactgtta ctcaggatga acgatatcag tgctataatc aagagcaaaa 180
 tgatacagag ggtccaaaag acagagaaaa ggatgtcagt gaatatTTTT atgagaaatc 240
 cctacctagt gtgaatgata tagaagcctc agttaataga agtagaagcc ttaaaataga 300
 aacagacaat gtncaggaca tttctggggg acttgaagcc catgttcacc ancagtcttc 360
 agtggattca cagatttctt caaaggaaaa caaaggacct catttctgat gccacagaaa 420
 aggtttccat cgctgcanaa gatggcactt tagacgatac cttttccgan gaattggaga 480
 agccccgcag tttacggaaa caagaagaca acctatntgc tnaancttca aaagagcttt 540
 gttcancact tctggatctt ttaacaa 567

<210> 2685

<211> 690

<212> DNA

<213> Homo sapiens

<400> 2685

```

tttataatat tccacctaataatgaaacga atttagaaga ttgctcagta atgcagccac 60
ctgttgccta tccagaagaa aatacactac tcatcaagga agaaccagat ttagatgggtg 120
ctctactctc ggggccagat ggtgatagga atgtgaatgc aaatttattg gctgaagctg 180
gcactagtca agatggaggt gatgctggta cttcacatga tttcaagtat ggtttgatgc 240
ctggtccttc aaatgatttc aagtatggat tattgccaga atcttggcca aaacaagaaa 300
cctgggaaaaa tggatgaatca tctctaataca tgaacaagtt aaaatgccct cattgtagct 360
atgtagccaa atacagacga acactaaaaa ggcacttgct cattcacaca ggagtggat 420
catttagctg tgatatttgt ggaaaactgt ttactcgaag agaacatgta aaaagacatt 480
ccctgggtgca taaaaaggat aaaaaataca aatgtttggt gtgtaagaag atcttcatgt 540
tagcagccag tgttggaaata agacatggat ctcgacgtta tgggtgtttgt gtaactgtgc 600
anataaatca cagccaggaa ggcaagaagt gtnatcaggg acaggatcaa attcccccg 660
atganatacg aganatgagt ngaaactgat 690

```

<210> 2686

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2686

```

aagatgcccc ggcgtctttc tagcctccgc ctccaggcgg gtgaggaggt gacacctgag 60
aatcctctcc tctcaccct gaccctgccg gaaagcgaaa ctganatgcg ggcatggggc 120
cctgggaagc gtggggaagg ggaaaggaga aagccagaaa atggagaaat taagtccttt 180
ccatggatca ttccttctgt aaacaganat caciaagcaa gagcttcanc atcctcgtga 240
aaaagacatt ttgttctggg tgtcatcatc tccttccact acagcttgca attggaacaa 300
gcttcacatc ctgggggtgc tgcctatctc tgtcttgatt tctgtctgtc tattcctccc 360
attgacagga atgtcgtttg tatcctccac gcancagttt gcaaaaatcc agcaaggttt 420
atggtttatg ttgcccانca tgintaaaca caacgctctc aaatgctttt taaaaatcta 480
tgaatttggt agatgtcttc acatcctggt cctcctaccc caattctcaa acacaaanta 540

```

ctctgttgcc ctattatant cctgcganaa ttctggctaa ngattaagtt gacngtctaa 600
gcccccaa 608

<210> 2687

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2687

gtccctcaca ccgagagttc ctgcgcgtgg ggagttggag agtttgctg gcgggaacgc 60
ggcggcagtg agagcgagcg gcgccggccc ttgcgtccgg tgcggagatg ctgaccccg 120
cgttcgacct cagccaggat ccggacttcc tgactatcgc catccgcgtg ccctacgccc 180
gggtctccga gttcgacgtc tacttcgagg ggtctgactt caagttctac gccaagccat 240
actttctcac attgaccctt cctggaagaa ttgtagaaaa tggaagtgag caagggtcct 300
atgatgcaga taaaggaatt tttaccattc gcctgcccaa aaacccttg ccagcatttt 360
gaggggctga acatgttaac tgctcttctg gcaccagaa aatcccagga cagcnaaacc 420
acttgtggaa gaaataggtg cttctgagat tcctgaggaa ttagttgacc atgaagagtt 480
tgattgggaa attgagcana caccctntga a 511

<210> 2688

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2688

gtgccgcccg ggagaacagg tcatcggtcg gttcccgtga aaacaaaaac aatcggccgc 60
gccgtcgcag gcacccgaac gtcgcgagcg gggcctgggg acgcggagcc gagtgcagcg 120
agcgaacggg agcagcggcg actcgccggg gggctagggc gccatggggc aggcgggctc 180
cggctgcgcg gggctcccc ggcgccgcgg ctagtgccgc cgccgcctcg gccgcctcag 240

cctccccgcgc cgccccgcttg gggaacgagg agcaggacgc ggcctcgggtg gggccccgggc 300
 cgaacggctg cggacacctg ggcgccgagg agccgagcgc cgccgtctcc ggcatggatc 360
 agtgcgtgac ggtggagcgc gagctggata aagtgtgca caagttctca ngctacnggc 420
 anctgtgcga ncgcggcctg gaagganctc atc 453

<210> 2689

<211> 742

<212> DNA

<213> Homo sapiens

<400> 2689

agaagagaaa gtcaatgaaa ttaaagaaga cagtcattgt ggagaaactt ttaccccagt 60
 tccagatgac aggctgaact tccagaagaa gaaagcttct cctgaagtaa aatcatgtga 120
 cagctttgtg tgtgaagttg gcctaggtaa ctcatcttct aatatgaaca tcagaggtga 180
 cactggacac aaggcatgtg aatgtcagga atatggacca aagccatgga agagtcaaca 240
 acctaaaaaa gccttcagat atcacccctc cttgagaaca caagaaaggg atcacactgg 300
 aaagaaaccc tatgcttgta aagaatgtgg aaaaaacatt atttaccatt caagcattca 360
 aagacacatg gtagtgcaca gtggggatgg acctataaa tgtaagtttt gtgggaaagc 420
 attccattgt ctgagtttat atcttatcca tgaaagaact cacactggga gagaaaccgt 480
 atgaatgtna acnatgtggt aaatctttta gttattctgc taccctcga atacatgaaa 540
 gaactcncat tggagaaaag ctttatgaat gtccggaatg tgggaaagca ttccatagtc 600
 ccagatcctg tcccagacnt gaaaggagtc ccatgggana aaaggttatc catgttagga 660
 atgtggaaaa gccttcctgt gtcccgttat gttcgtnac ntgaaaggga cccctctngg 720
 aaaaaacttt ntgaatgtta nc 742

<210> 2690

<211> 724

<212> DNA

<213> Homo sapiens

<400> 2690

```

gaaaattgca cacttaaaga catcagtga tgaaatcaca agtgggaaag gaaagctgac 60
tgataaagag agacagagac ttttggagaa aattcgagtc cttgaggctg agaaggagaa 120
gaatgcttat caactcacag agaaggacna agaaatacag cgactgagag accaactgaa 180
ggccagatat agtactaccg cattgcttga acagctggaa gagacaacga gagaaggaga 240
aaggagggag caggtgttga aagccttata tgaagagaaa gacgtnttga aacaacagtt 300
gtctgctgca acctcacgaa ttgctgaact tgaaagcaaa accaatacac tccgtttatc 360
acagactgtg gctccaaact gcttcaactc atcaataaat aatattcatg aaatggaaat 420
acagctgaaa gatgctctgg agaaaaatca gcagtggctc gtgtatgatc agcagcggga 480
agtctatgtn aaaggacttt tagcaaagat ctttgagttg gaaaagaaaa cggaacagc 540
tgctcattcn ctcccacagc agacaaaaaa gcctgaatca gaaggttatc ttcnagaaag 600
agaagcagaa atgtttcnac gatctcttgg caagtgcaaa aaaagatctt gangttgaac 660
gacnaaccat aactcnctga attttgaact gägtgatttc caanaaaatt ttgaagaaac 720
cccn 724

```

<210> 2691

<211> 563

<212> DNA

<213> Homo sapiens

<400> 2691

```

ctctcgggcc tgggcggcgc anacgaagcc tgaggcggcg gcgcgaggca gttccagcta 60
ttcttcagat gctctggatt ttgagacgga gcacaaattg gaccctgtat ttgattctcc 120
acggatgtcc cgccgtagtt tgcgcctggc cagcacagca tgcaccctgg gggatgggtga 180
ggctgtgggt gccgacagcg gcaccagcag cgctgtctcc ctgaagaacc gagcggccag 240
aacaacaaaa cagcgcagaa gcacaaacaa atcagctttt agtatcaacc acgtgtcaag 300
gcaggtcacg tcctctggcg tcagccacgg cggcactgtc agcctgcagg atgctgtgac 360
tcgacggcct cctgtattgg acgaatcttg gattcgtgaa canaccacag tggaccactt 420

```

ctggggtcctt gatgatgatg gtgatcttaa aggtggaaat aaagctgcca ttcanggaaa 480
cngggatttn ggaaccgccg ccgccaccgc gcacaacggc ttctcctgca ncaactgcan 540
catgctgtcc gaacgcaagg act 563

<210> 2692

<211> 754

<212> DNA

<213> Homo sapiens

<400> 2692

gnaactgata tacatttatt tgaataatgt gtaactatta tggatctatt ttaatgaaca 60
atttttacca ttcccaagc tgcctgttta ttataagcat gacatgttta ctataaacct 120
tttgcccca taatttcttt ttttaagga aattaatatt agtaaaataa acacctcttt 180
aatggaagct gcaaccttct agtgatccaa gtagacaata gatggtggca tcacagactt 240
tatctacaca ctttcgggtc tgaccactac ctcccacaat acctagccat tttggaaggg 300
gaaaacatgc ggtggtctag ctgtatagct cagggttaa tttcagcttc tgagattgtg 360
atgtcatatt tcactctcaa aacataggct gaaagcacga attactcaaa aagtaagcaa 420
gccaatacct ggtgaatcta tgggacagtc atacacatac atcaggggaa aatgtgtgtg 480
tacaacccaa atttacagta tgattgtcat tctttgactt tgttttgtat agcctgactc 540
tgttgaacat gaaattatta gtactctagg ttttgacag cttganttca tttgaattcc 600
ntccttanga ataagttttt atatacactg ctaaagtgt gatgagaatc ataaaacact 660
aaccantga aggtagctgt gattcacttt ccccnccct aatgaaagac taagccagta 720
tttcngttg tgtnantgga ctccgttccc tcca 754

<210> 2693

<211> 653

<212> DNA

<213> Homo sapiens

<400> 2693

```
gcagccaagc accacattac tattgcagag atctatgaga ctgaacttgt agacattgag 60
aaggctattg cacattatga acaatctgct gattattaca aaggagaaga atccaacagc 120
tcagcaaaca agtgtctgct gaaggtggca gcatatgctg cccagcttga gcagtaccag 180
aaagccattg agatctatga gcaggttggg gcaaacacaa tggataatcc tttgttgaaa 240
tacagtcaa aggattactt cttcaaagct gccctctgcc acttcatagt anacgagttg 300
aatgccaagc ttgctcttgg gaaatatgag gaaatgtttc cagcatttac tgattcaaga 360
gaatgtaaat tattgaaaaa actcctagaa agctcatgaa gaacagaaca gtgaagctta 420
cactgaagca gtgaangaat ttgactcaat atctcgcttg gatcagtggc tgaccaccat 480
gttgcttcgc atcaaaaagt ccatcccagg ggatggagaa ggagatggag acctanaatg 540
aaatgttttt gtctttgttg catgcagcta actcctcttt anttttgtct taggggccag 600
tgatctttat ngggatgcct atttaatggc ttaattttgt tgentntnaa cca 653
```

<210> 2694

<211> 710

<212> DNA

<213> Homo sapiens

<400> 2694

```
gcatttttta tggttttgtt tcaaaagcca ttttcttctg ggaaaactat taccaaacac 60
cagtggatca aaatatitaa acatgcagtt gctgggtgta tiatttcaact cttgtggttt 120
tttggcctca ctctttgttg accactaagg actttgctgc tatttgagca cagtgatatt 180
gttgtcattt cactactcag tgttttggtc accagttctg gaggaggacc agcaaagaca 240
aggggagctg cttttttcat tattgctgtg atctgtttat tgctttttga caatgatgat 300
ctcatggcta aaatggctga acaccagaa ggacatcatg acagtgctct aactcatatg 360
ctttacacag ccattgcctt cttaggtgtg gcagatcaca aggggtggagt attattgcta 420
gtactggcct tgtgttgtaa agttggtttt catacagctt ccagaaagct ctctgtcnac 480
gttgggtggan ctaaagctct tcaancitaa tctcatcttg tttctgtgct tctcttctgc 540
ccatgggtca ttgttctttc tgtgacaact ganantaaag tggantcttg gttttctctc 600
```

attatgcctt ttgcaacggt tatctttttt gtcatgatcc tggatttcta cnttggattc 660
catttgttca ntcnaaatgg aatttccnaa tgttgcttgt tatggatccn 710

<210> 2695

<211> 506

<212> DNA

<213> Homo sapiens

<400> 2695

ttgcatttcc ccctcctcag atgggaagcc tggcaaagct gccaaccgg gtagtgcccc 60
tcacccatcg gatcactgcc ttcttctctc tcttgcccca ttcacccgct tccttgact 120
ctgggagtgg ggcagggtta ggtgggcctt acanacaggc tgaggtttgg gtggtgtgat 180
ctgtcctaata tggccctca ccaatgcac tatctgtctg ccaccagccc accccaccct 240
gccccaccc tcaccacgc ttctgtcat tggctcatt cccagcctgg aagcaggag 300
taaggctgga ctccaatggc ccattcccct caccagcc caagacgtgg gaggtgctt 360
cccagtaaga atccaggagc aagcttttgt gaatccaatg ggctgaatgg ctctatggat 420
gtggttgttt ggatgtgta aggaatgctt agcaaatgt gtgtgtatct ctgaagctnt 480
canggggttg gtgggtnttt ttctct 506

<210> 2696

<211> 454

<212> DNA

<213> Homo sapiens

<400> 2696

ccccgcctcc gccccggct ggcgtgagct ggggtgttcc tgcctctctc agtccgggtt 60
tggagactcc tgcgtcctcc gacttttctg ggaagagatg tcaggagaaa gtgtggtgag 120
ctcagcggtg ccagcggctg ctaccgcac cacttcttc aagggcacga gcccagctc 180
caaatacgtg aagctgaatg tgggtggagc cctctactat accaccatgc agacgtgac 240

caagcaggac accatgctga aggccatgtt cagcgggcgc atggaagtgc tcaccgacag 300
tgaaggctgg atcctcattg accgctgtgg gaagcacttt ggtacgatac tcaactacct 360
tcgagacggg gcggtgcctt tacccgagag ccgccgggag atcganganc tgctagcana 420
agccaagtnc tacctantcc aaggcctggt ggaa 454

<210> 2697

<211> 729

<212> DNA

<213> Homo sapiens

<400> 2697

tattcaacat ggaggcggag gtcgataagc tggaactgat gttccagaaa gctgagtctg 60
atctggatta cattcaatac aggctggaat atgaaatcaa gactaatcat cctgattcag 120
caagtgagct gtcaccactg actaaagaag agaaaactgc ggcagagcaa ttcaaatttc 180
acatgccaga tttatgaagt aatggacttg gaaaggaaat tctaacagag aagagcttaa 240
ttccggagaa atttaggaag atgtcttggt aacccttgat gtctanagat tgggggctgg 300
tgaagggggt ttggcttcaa tgactggata atgatatctt tcatgagaga gattataaga 360
agaagggcag ataacatatg aataaagttc agccaaaagg atcaaattgag aataaaacga 420
tttaaatata tgtncacacg catgcacaca cacacttagt cttgttnattt caggccagaa 480
attctcaaca ctattttgca tctgttttct ttttctaagt catgataata tanatgttct 540
ggtctatcat aaaanaatgt ttatgtntct ttcagtcatt cggtatgtgg ctttgttaat 600
taaanttttag gccaaacatt tgtgttatca tgatatataa tttcnttttg ttaattttga 660
ttgccntgt ngtcncatta ttgttgaaac tgcttttatg ttacctgttn tccccccca 720
aaacctaaa 729

<210> 2698

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2698

```

aattaaaggt ggaaaagggg gaaacgtccc tgcaaagttc tgagacacat cctcctgaag 60
tggctcttcc tcctgtgggg gagccgcctg ccctggaaaa ttccactgct ctccttgagg 120
gagttaatac agttgtggtg acaacttctg cccagaggc tttgctggcc tcctgggcga 180
gaatttcagc cagggcgagg acaccagagg cagtggaatc tccacaagag gcctctggtg 240
agcgcaacat gaagagctta ttctggtcca atggggaaat aagcttagta gatattaatc 300
actggtacat tttagggtat atcaaaatcc ctttgagggc cggtgattcc tggaccctgc 360
ccacagagtt tctggtgcag gtctagggca ggacctgagc atttatttgc atttcttttt 420
ttttttcctt tttttttttt tganacagtt tctcccttgt tgcccangct agantgcagt 480
ggcatgatct cagctcaccg caacctccac ctcccaggtt caagcaattc tcctgcctca 540
nccttcctga ntncctgggat tacaggcatt ttncacccat gcccggttaa tgttgtgttt 600
ttantaaaaa tggggtttct ccatgttggt c 631

```

<210> 2699

<211> 742

<212> DNA

<213> Homo sapiens

<400> 2699

```

cggtcctac cctgaaggtg cacctgcagt cctcgccgat aagaggcagc agttcggaag 60
ccggttcctg agagatccgg cgcgcgtctt ccaccacaat gcctgggaca atgtggagtg 120
gtcggaagag caagccgcgg cggcggagag aaaagtccag gagaacagta tccagcgggt 180
gtgccaggag aaacaagttg attatgagat caatgccac aaatactgga atgacttcta 240
caaaatccac gaaaatgggt ttttcaagga tagacattgg ctttttaccg aattccctga 300
gctggcacct agccaaaatc aaaatcattt gaaggactgg ttcttgagga acaagagtga 360
agtacctgaa tgtanaaaca atgaggatgg acctggttta ataatggaag aacagcacag 420
gtgttcttcg aagagccttg aacataaaac acagacnct cctgtggagg agaattgtac 480
tcacaaaatt agtgacctgg aaatttgtgc tgatgagttt cctggatcct canccacct 540

```

ccgaatactg gaagttggct gtggtgtggg aaacacagtc ttccaattt taaaacgaa 600
 caatgacccg ggactctttg ttatttgctg tgatttttct tccacagcta ttagaactgg 660
 tccaaacaaa ttcaaatat gatcctnctc cggtgttttt gcctttgttc cccaacctgt 720
 ntatgaaaa aaaaaattnc cc 742

<210> 2700

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2700

ccganaggag tagcctgatt cccatctccg gacatcgggc ctctcccaat cctgtggcca 60
 tggaaacccg aagtgacaac agaccgtctg ttcccgttca gttccaatat tttttgcca 120
 cttaccccc ttctgcatac ccaactggcg cacataccta caccccaatc accagttccg 180
 tgtccactat ccgacagtat ccagtttcag ctccaggctc aaactctgcc atcacagctc 240
 anactgggtg tggggtagcg tctaccgtcc acctaaacc catgcagttg atgacagtgg 300
 atgcatcgca tgctcgacat attcaaggga tccagccagc acccatcagt acccagggt 360
 tccagccggc cccatttggg acccagggat acagcctgca ccacttggca cacagggaat 420
 tcaactcanca accccaatca acacacaagg gcttcagcct gcacctatgg gtactcanca 480
 acctcagcct gaaggaaaaa ttcancantg gtgttggcan atggaccaca attgtggcca 540
 acctattanc aatccattca 560

<210> 2701

<211> 773

<212> DNA

<213> Homo sapiens

<400> 2701

caagcatgtg atgttcttgt accttcttct gatagtacat ctcaacagtt gactccatat 60

agtcaagtcc atatttgttt gagatctggc aactatcagg aggtaataca gattttcatt 120
 gaagacaact taaccttgag tttaacctgtc cagttccgac agtcagtcct aagagaactc 180
 ttttaagaaag ctcaacaggg aaatgaagct ctagatgaaa tctgttttaa agtttgtgcc 240
 tgtaatacag tccgtgatat actggaaggc agaacaatta gtgttcaatt taaccagcta 300
 tttcttagac caaataaaga gaaaatagac tttcttcttg aggtatgttc aagatcagta 360
 aatttagaaa aagcttcaga gtctttgaaa ggaaacatgg ctgcttttct aaagaatgtg 420
 tgtctgggggt tggaagatct gcagtatgtt ttcattgattt cttcacatga gcttttcatt 480
 acattgttga aagatgaaga acgaaagcta cttgttgatc agatgaggaa gagatcccct 540
 agagtaaadc tgtgcattaa acctgtaact tcattttatg atatcccagc ttcagcaagt 600
 gtcaacattg gtcagttaga gcatcaactt atattgtcag tggatccttg gaagattaga 660
 caaattttaa ttgaattaca tggatgact tcnnaacgcc agttctggac agtgtctaata 720
 taagtgggaa gtcccnctg tctatagtgg ggtntcccg gggaatttaa nac 773

<210> 2702

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2702

cttgttggcc tactggctct ttttgacagc cccagtgcg aaaggctgcc agcatgtcat 60
 cagttagccc catccagatc cccagtcgcc tcccgtgct gctcaccac ganggcgtcc 120
 tgctgcccgg ctccaccatg cgcaccagcg tggactcggc ccgcaacctg cagctgggtc 180
 ggagccgcct tctgaagggc acgtcgctgc aaagcaccat cctgggcgct atccccaca 240
 cgcctgaccc cgccagcgac gcgcaggacc tgccgccgct gcacaggatt ggcacagctg 300
 cactggccgt tcaggttgtg ggcagtaact ggcccagcc ccactacact ctgttgatta 360
 caggcctatg ccgtttccag attgtacagg tcttaaaaga naaccatata ccattgctga 420
 agtggancag ttggaccgac ttgaggantt tcccaacacc tgtnaaatga gggaggagct 480
 anga 484

<210> 2703

<211> 696

<212> DNA

<213> Homo sapiens

<400> 2703

```

aaaaatcagt cagcaaaaga agatgtaaca gaaaggcaaa gcaccaaacg atctcctcag   60
caaactgtac catatgttgt tcctctctct cctaagctcc ccaaaacaaa ggagtatgcg  120
tctgaaggag aaccattggt tgctggggga agtgccattc tcaaagagga gaatctttca  180
gaagattcta agagctcatc actaaattca ggaaattatt tgaatcctgc ctgtagaaat  240
cctatgtata ttcatacttc agtctcccag gatttttctc gaagtgtgcc aggcaccaca  300
agttcaccac tagttgggga catatccccc aagagcagtc cccatgaagt taaattccaa  360
atgcagagga aaagtgaagg aaattgatgg gaaggctctg ttcctactca agantgatgt  420
gatgatgaag tatatggggc tgaagctggg gccagcatta aagctgtgtt actacattga  480
aaagcttaaa gaaggaaaat acagttaaaa aaatgtgtna gtttanattg ggacataatt  540
ctcagggtgn ctgttaacat ttttaattta aagtatttct cttaacantt tttgttttgt  600
naacagttcc cataaaaata ttttatcana attgcaaaac tgttntaaca ntttcaatcc  660
actttgtttt ttttctgga atccccaacc ancttt                                696

```

<210> 2704

<211> 525

<212> DNA

<213> Homo sapiens

<400> 2704

```

aatcctggaa caaggctaca gcgtcgaaga tccccagcgc tgcgggctcg gagagcagtc   60
ctaacggcgc ctcgtacgct agtgtcctcc cttttcagtc cgcgtccctc cctgggccgg  120
gctggcactc ttgccttccc cgctccctcat ggcgctgctc cgacgcccga cgggtgtccag  180
tgatttggan aatattgaca cagganttaa ttctaaagtt aagaatcatg tnactattag  240

```

gcgaactgtt ttagaagaaa ttggaaatag anttacaacc agancagcac aagtngctaa 300
 gaaagctcag aacaccaaag ttccagttca acccaccaaa acaacaaatg tcnacaaaca 360
 actgaaacct actgcttctg tcaaaccagt acagatggaa aagttggntc caaagggtcc 420
 ttctcccaca cctgaagatg tctccatgaa ngaagaaaat ctctgccaag ctttttctga 480
 tgccttgctc tgcaaaatcn anganattga taacnaagat tggga 525

<210> 2705

<211> 780

<212> DNA

<213> Homo sapiens

<400> 2705

ttctacaggg gatctggaca actctcctct gtccccacct tcaccaaggg accaaaagca 60
 gaacgcatac tcgggcactc aagaagttaa gtgaggtgaa caagcgctc caggatctcc 120
 gttcctgtct gagccccaag ccacctcagg gtcaagagca acagggccaa gaggatgaag 180
 tgggtcttggg ggaaggggccc accctcccag agaccccccg actcttccca ctcaaaatcc 240
 gttgccgggc tgacctggtc agattgcccc tcaggatgtc ggagcccctg cagagtgtgg 300
 tggaccacat ggccaccac cttgggggtgt cccaagcag gatccttttg ctttttggag 360
 agacagagct atcacctact gccactccca ggaccctaaa gctcggagt gctgacatca 420
 ttgactgtgt ggtactaaca agttctccag aagccacaga gacgtcccaa cagctccagc 480
 tccgggtgca gggaaaggan aaacaccana cactggaagt ctcactgtct cnagattccc 540
 ctctaaagac ccttatntcc actatgaaga agccatggga ctgtcgggac ggaactctcc 600
 ttcttctttg atggggacaa agctttcagg caggggactg cccacttgaa ctgggcatgg 660
 aatctgggga actcctttna agtctggggg ctgacacccc ctccctgttt gacggggcca 720
 ccctggaatt tgggggaaaa tgactttccc ttttttgccc cccnanggg ttnnccitan 780

<210> 2706

<211> 512

<212> DNA

<213> Homo sapiens

<400> 2706

```

accaatttct ctgagtttct tgaaatgtct ttaaaacaga catttttctc accaaacagt   60
ttgagtatct ttattaagga aacccttacg aatcctgaaa attatgctag catgattttt  120
ttatatatag aagttttaaa ataaaccagg tcaggtttgt atatgtaaaa ttgttgacat  180
caatgatgtc tttccatatt cttatctggg ctttaagaaat acattctgta tttttccaga  240
ttctttgtag cctttgaaag atttttacag tacatatgtc ttgactgagc tgtcctttct  300
taatacaaaa gcgtgtataa ttttcttaac ttgtacagtt ggtaaacttt tatgagagga  360
attgttattc tgagtctgtc agctttcatt ttattttgct aaggtttttc taatgaattt  420
ttaagtgttt gtgtagtaat taagtcatat ttcttatcca ggtggttaaa gcattcataa  480
aggattataa aatttnnttt nntttttttt nt                                512

```

<210> 2707

<211> 355

<212> DNA

<213> Homo sapiens

<400> 2707

```

agtgccgaac cttcggtgtc tccccgcctc aggacaccaa gatgcctggc gaacagcagg   60
cagaggaaga ggaggaggaa gagatgcagg aggagatggt gctgctggtg aagggtgagg  120
aggatgaggg tgaggagaag tatgaggtgg tgaaactcaa gatcccatg gacaacaagg  180
agagacacga tctcgctttg tcacccaggc tggagtgcag tggcacgtga ttgtagctca  240
ctgcagcctt gaactcttgg gctcaagtga tcctccttcc tcggcctacc aagttgttgg  300
gactacaagt gcacccacc acacctggct aatttttcac tttttgttna nacga       355

```

<210> 2708

<211> 746

<212> DNA

<213> Homo sapiens

<400> 2708

```

actcccagac tccttgcgga gctcgccgcc tgattctagg ctggtcacta ctccgagcct 60
gtgacgtttg cggcagccag gccgtcgacg atgcccagtg aaactctctg ggaaattgca 120
aaagctgaag tggaaaaaag gggaattaat ggaagtgaag gtgatggagc tgaaattgca 180
gaaaaatttg ttttcttcat tggcagtaaa aatgggggaa agactactat tattctaagg 240
tgtcttgaca gagatgaacc accaaaacca accttagctt tggaatatac atatggaaga 300
agagcaaaaag ggcacaacac accaaaagat atcgctcact tttgggaact cgggtggagga 360
acctctttat tggacttaat cagcataccc atcacagtg acaccttacg gacgttttct 420
cttgttctcg ttctggatct ttcaaacct aatgatctct ggcccacat gggaaaatct 480
cttgcaagcc acaaaaagcc atgtagacaa agtgataatg aaactgggaa agacaaatgc 540
taaagcagtt tctganatga gacagaagat ctggaataat atgccgaagg atcatcctga 600
tcatgaatta attgacccat ttccggtacc tctggtcata attgggaaat taattntgat 660
gttttcccgg attttgagtc tgaaaaaaaaa aaaggttatt ttgccanaac cttccaattt 720
gtttgcccct ttattntgga ancctc 746

```

<210> 2709

<211> 620

<212> DNA

<213> Homo sapiens

<400> 2709

```

agccgcctcg cgcccgggtcc cgcggctcgca gtcccagccg cctcctccgc gcagccgccg 60
cctcagctgc tcgctctgtg ggctcggtcct ctccggcact tgggctccag tcgcgccctc 120
caagcccttc aggccgcccc agtgtcctcc tccttctccg gccagaccca gccccgcgaa 180
gatggtggac cgcgagcaac tgggtgcagaa agcccggctg gccgagcagg cggagcgctg 240
cgacgacatg gccgcggcca tgaagaacgt gacagagctg aatgagccac tgtcgaatga 300
ggaacgaaac cttctgtctg tggcctacaa gaacgttgtg ggggcaagcc gctcttctg 360

```

gagggtcatc agtagcattg agcagaagac atctgcacac ggcaatgaga agaagattga 420
 gatggtccgt gcgttccggg agaagataga taaggagttg gaggctgtgt gcccggatgt 480
 gctgagcctg ctggataact acctgatcaa gaattgcagc gagacccact acgagagcaa 540
 agtgtttctac ctgaagatga aaagggacta ctaccnctac ctggctgaaa atggcccccg 600
 gaanaaaaaa agggcnacgg 620

<210> 2710

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2710

ttaagctatt ctttagaaaa ttcagttcta aggaaagagt tgatccttat gagggagatt 60
 ctgatcatat taaaaatctg ggtaaactaa aacctgctca taacctcata gtatgcaacc 120
 aaagaatact aattcatttt atcactttca ttggtaaaac ttttaaattc aacacctgaa 180
 aatcatgagg gaaaatgatt acctcttgag atatattatt gatgacattt aaagggaaaa 240
 gtcctaaatt taccttaa atactgaaatg aattaagcct tcatagcgta ttttcttga 300
 agcatttaaa ttgctagt atgaatcaaa taaatttgat atacttaaaa taatttggac 360
 agtttttatg tgaccagatt aagtgccttt gtcatttgag ctgacaagtt tttaaactt 420
 cagtgcctcc taaatgttta tactcatcta gttttctca atttgtagtt ttattatgca 480
 gttaaactctg tatcagtggg cttttaaaac ttggtactac tactaaatct actatatcat 540
 gaatattcat ttatttttat agtatcagaa ctggggttga tttcaatgtt aataaactag 600
 gcnaaacaaa taactgtag aaggtacaat tttcttctct tccctgtaac tgaaagtfff 660
 aanaattggt ccttggggaa aaattttttt aaaattccct ngaatcntag gggcncattt 720
 tgttttccta ttgaaaaaca attaccctgg ttacattctc caaaagaatc tcccaaata 780
 atttttataa agttctaag gcnccctgntn aataatttaa aaantatttt nca 833

<210> 2711

<211> 829

<212> DNA

<213> Homo sapiens

<400> 2711

```

agatTTTTat tggactgtgg ctgggatgag cacttttcta tggatattat tgattccctg   60
aggaagcatg ttcaccagat tgatgcagtg ctgttgcttc accctgatcc tctccacctt  120
ggtgccctcc cgtatgctgt cggaaagttg ggtctgaact gtgctatcta tgcaaccatt  180
cctgtttata aaatgggaca gatgttcatt tatgatcttt atcagtctcg acacaatata  240
gaagatttta cactctttac attagatgat gtggatgcag cctttgataa aatacagcag  300
ctaaaattct ctacagattgt gaatttgaaa ggtaaaggac atggcctgtc tatcacacct  360
ctgccagctg gtcatatgat aggtggaaca atatggaaaa tagtcnaaga tggagaagaa  420
gaaattgttt atgcagttga cttcnaccac aaganggaga tccattttaa tggatgttcc  480
ctggaaatgc taagcaggcc ttccctactt atcacagatt cattcaatgc tacatatgtt  540
cngcctagaa gaaaacagag agatgancag cttctgacaa atgtccttga aacacttcna  600
agtgatggaa atgtgttaat ancagtggac acagcaggca nanttttgga acttgctcaa  660
cttcttgatc anatttggga ggactaaaga tgcaggattg ggtgtttact cctttggcac  720
tcctaaatta atgtcagttt accaatgntg ggtggaagtt ttcctaagtt cccngttna  780
aatgggattg aatttaataa atttgatnaa aatnttttg gaaagaacc                829

```

<210> 2712

<211> 715

<212> DNA

<213> Homo sapiens

<400> 2712

```

aaaattggat ggaaagaaat tctgtgtgct cccaggattc cagttcctta ccggaggttg   60
gtgccgtctg agtctgaaaa gctgccctct tgccgtgttc atgcttttgt agaacacctt  120
cagagccttg gcaagctctc ggtcagagcc agcttgctgt gtgcacattt ggctcatctc  180
cccggcggat ggcagttgca cagtcatccc gctgatcttc anagtgttgg aaggcttcgg  240

```

ggctgaggtg gaaaaaggta acattgattt atgtatctct ttctctgggc atctctatat 300
 ttatttttggg ggcattctac tgcattcagca tttatcaggc accagtttgg atccatccaa 360
 gggaaagggg aaatctcaca gggcagaana aatgtccggc attttttggg tatgaaagaa 420
 gatacgaatt aactcattta aaagtttggg tcttaaaaga caaatacaca tcccaaattg 480
 angaatctag ggataagcta aacagccaan actggagcag tctctcacct tgaccagaaa 540
 canttttcgc aagtgatgct ttganaaaca cgttctcttc tctcanggct ctgttaattg 600
 tcctgaacgg gttccgtctc ctgctctanc ttgaacagct tcaaataaaa ttctggttat 660
 ctggtttgat gcctgccta ccaaaaaaac atntcnttn cnccttttg tttgt 715

<210> 2713

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2713

tacacaggac aactccatgt ggttgatttt actggcatgt cttggtgacg aagagttggc 60
 caagtgaatg atgcatcttt tacttggagc tctccagcct ttgtcatagt tcccagacct 120
 tttttccttg tggatcatca ggaggtgatc aattacatgt gcacagtgtc aggacgggag 180
 gcagagccgg ctgagancag gtccaccagc ccacctatag caggaagcgt gtcggtgctt 240
 aggaaatcta ggacttccag ctccctcat gtcagataga aaaaaagtca ggaaaccagc 300
 tcgtggacag gggctttggg tccaaaactt ggacaaacct gatgccttaa ggaaaagggt 360
 aagatgagag ggggcttcca gagtcaatga acgtcacctc tcagccgacg gataccggga 420
 gcgcttgggc aaaacagcag anaaagaaag actgtggtcg gggaagtgga atgcttcgat 480
 gcaggccaaa attcaaggct ctggggctgg cctcacaana agcttcttcc acggggcttg 540
 acaccaganc agccccgcg tgaaatgana angcacgctt agcactggga agaaaagctg 600
 anttaagaaa attctttatc attgtttgcc ttcccttggg gaaaacattc aggcagtaaa 660
 atgacatcca cgtgttctg ttgcacncan cggcttcng gaacaaattt ancgtgggg 720
 gactatctgg ggctcgtctc tctgtncctt 749

<210> 2714

<211> 819

<212> DNA

<213> Homo sapiens

<400> 2714

```
gcaccagggc tgactgtanc tgggggaaga cattttactc atttgctctt tcctttcata 60
cagtcagctg gtccctcttc tcaggtgtag atcacctatt ataattttac ctaattttga 120
tactctgata aggaaagtcc caggacttat cagctgggat aggcctcact tacaagacag 180
ctctgttcag tatttggaag aaagcctgac aggtttcttc ggaaaagtgg ccatccatgg 240
aatgaatgaa atgttctctt tctattccag ggattgcagt ggcaaagcta ggctaggtct 300
tggaggctgg tgtaaggcga tgtgggtgaa ggcaggaggc tgatggaaag actgggggga 360
agaaaagccg aaatggattc acggtgcctt ggatgaagga cgagagggga actgcaagct 420
ccttcaactg gttctgtccg gtgagaagtg atcaagcttg ggctgacaag aagetccang 480
agccctcacg ttctttcgct tttttacctg ccaaccaaac tgctacaaga caacaccctg 540
atctggcatg gacatcnegg gtccaagcct gtaaccccaa atcgataat ctctgcagct 600
gataacaagc aaaagaaaac cangcaacac catattaaag aagaaaacaa tcaactctga 660
aatccactta gaaataatgt ttcatcctaa ataaggctct tgctttaaga aattgttacc 720
tggcttgcat cnttcctaaa aactcctatc gtctgttttc caaaccccaa nggaaggaa 780
cccccttcc nttaataa ntccccctc cntttgcc 819
```

<210> 2715

<211> 736

<212> DNA

<213> Homo sapiens

<400> 2715

```
tgagtgcccg tcgcgtcgcg ccgcgtcgcc ccccgggccg cctccttgcc gccagtggcg 60
ggctccgttc tccctcgaag cactcccccc agctccatga atggaaatcg gctccgcagg 120
```

acccgctggg gccagcccc tactcatggt gccagaaga cctggctatg gcgccatggg 180
 caaaccatt aaactgctgg ctaactgttt tcaagttgaa atcccaaaga ttgatgtcta 240
 cctctatgag gtagatatta aaccagacaa gtgtcctagg agagtgaaca gggaggtggt 300
 tgactcaatg gttcagcatt ttaaagtaac tatatttgga gaccgtagac cagtttatga 360
 tggaaaaaga agtctttaca ccgccaatcc acttcctgtg gcaactacag gggtagattt 420
 agacgttact ttacctgggg aaggtggaaa agatcgacct ttcaagggtgt caatcaaatt 480
 tgtctctcgg gtgagttggc acctactgca tgaagtactg acaggacgga ctttgcctga 540
 gccactggga attagacaag ccaatcagca ctaaccctgt ccatgccgtt gatgtggtgc 600
 tacgacatct gccctccatg aaatacacac ctgtggggcg tcatttttct ccgctccaga 660
 aangatatta ccaccctctn ggaagggggc agggaaattt tggtttggtat tcatcantct 720
 gttcngnctg ccatgt 736

<210> 2716

<211> 664

<212> DNA

<213> Homo sapiens

<400> 2716

actcgtcgt ccccggttc cgggcacagc atggcggcca aggtgcagac aactaagcga 60
 ggggatccctc atgagttaag aaacatatct ctacagtatg ccagtactga ggttgatgga 120
 gagcgttaca tgacccaga agactttgtt cagcgtatc ttggactgta taatgatcca 180
 aatagtaacc caaagatcgt gcagctcttg gcaggagtag ctgatcaaac caaggatggg 240
 ttgatctcct atcaagagtt tttggcattt gaatctgttt tatgtgctcc agattccatg 300
 ttcatagtgg ctttccagtt gtttgacaag agtggaaatg gagaggtgac atttgaaaat 360
 gtcaanaaaa tttttggaca gactattatt catcatcata tcccttttaa ctgggattgt 420
 gaatttatcc gactgcattt tgggcataac cggaagaagc atcttaacta cacagaattc 480
 acgcagtttc tccaggantc gcaattggaa catgcaagac aagcctttgc actcaaagac 540
 aaaancaaaa gtggcatgat ttctgggtctg gatttcagtg acatcatggt taccattaga 600
 tctcacatgc ttactccttt tgggtggaaga naacttantt tcccantctg ggaagaantn 660

tctc

664

<210> 2717

<211> 684

<212> DNA

<213> Homo sapiens

<400> 2717

```

tcctggacag tttggacgtt acagttcgtc aggccgtgat cagtggcctg cagtgggact 60
gctcctttga tatctgaacc tctgttatgg gcttctctga gacaagtaaa tgtcaggtgc 120
aagatctgga tactaacagt ttcagtttgg gaaatccaag aaaaagaatt atcaagtttg 180
ataggaagc tctgtagcct tgactccagc aagaagaaaa ggtcaaaacc acgtgtttcc 240
caaaagtcca gactacaatg attcagctga ctgaggaca aggcctagca tttggctgag 300
canagccctc ttccttgccc tccaacctgg tggcataggc ttggcaaattg gacaacttgg 360
ttgtccagac aggttgagga ttcggttatg atcccctggg gaggtancag ggacctctgc 420
aactatgcat gatttctcaa acttcaagat tcatgtctgg atgtattatg ctgtggatat 480
aantttagta aggcggtcat ttcctactct gagttactgg ttacctaacc agtccatggg 540
tgtgacttgg tccttaagtc aggtcactat ctgcctccca ccctgggggc aggactgaag 600
tatanaaaaa catcntggct gttcaggaag ctgtggtttg aaaactganc ccanaaggc 660
actttcactg ncctccatta atgt 684
    
```

<210> 2718

<211> 588

<212> DNA

<213> Homo sapiens

<400> 2718

```

gantgccgaa ccgcgggaga tttgagccag gcctgttaaa ccaagttctc agcaggatgt 60
gcacagaggg cccagganga gcctcaggag ccggactgcc gttggccaac cgagtcccca 120
    
```

ggggagacac ttaagggaaa ttaaactgca gaggcaaga natgcctcag tcaagtcagc 180
caaaaacacg cgggtcatcc ccaagcccca ganaggcttt gaattgaagg cgantgcctc 240
agaatttgca tccattgttc tgtctttcct gggaagtat tcctcctggt ggccagccca 300
ccgacaaaat ggatttggat ctactggacc tgaatccac aattattgct gcaattaaga 360
aagccaaact gaaatcggta aaggangttt tacacttttc tggaccagac ttgaaganac 420
tgaccaacct ctccagcccc gangtctggc acttgctgag aacggctcct tacacttgcg 480
gggaaacaac atccttacag cactgcagct gcaccancag aaagaacggt tccccacgca 540
ncaccancgc ctgaacctgg gctgcccngt gctgggacnc gctgctcc 588

<210> 2719

<211> 659

<212> DNA

<213> Homo sapiens

<400> 2719

agtgtcnatc cctcagccag ggcatggagc tctcctgccc cggttcgcgg tgcccgggtgc 60
aagagcagcg tgcccgtgg gagcggaac gcgcctgcac cgcccgggag ctgctagaga 120
ccgagcggcg ctacaaaaa cagctggggc tgggtggccac gtactttttg gggatcctga 180
aagccaaggg gaccctgcga ccacctgagc gccaggccct gtttggctcc tgggagctca 240
tctacggcgc cagccaggag ctgcttccct acctggaaag angatgctgg ggccaagggc 300
tggagggtct ctgccgccac ttggagctct ataaccaatt tgctgccaac tcagagaggt 360
cccanaccac cctgcaggag cagctaaana aaaataaagg tttccggang tttgtacggc 420
ttcaggaagc cgccctgggt ttgggggcct tctctcaag acctgctccc tctgcctctg 480
caacggctcc agcagtatga naatctcgtc ctanctttgg ctgaaaacac aggtcccaac 540
agccctgacc atcaacaagc tcacacctgt ctttccctca tgaanaacta ctgcttatgt 600
tcacanacca agaagaactg tcacnctggg accacantct gacttgggct atcacancc 659

<210> 2720

<211> 590

<212> DNA

<213> Homo sapiens

<400> 2720

```

ttctttcttt ctttctttct ctttctttct ttgctttcc ttctttcacc tcttttttgt 60
aatttggtgt tgcaaatcat tgtgaggcca ctttctttc cccttccttc cttccttttt 120
ttctgttttt tttttttttt tttcccaaag tcttgctctg tcgcccaggt tggagtgcag 180
tggcacgata tcggctcact gcacctctg cctcttgggt tcaagcgatt ctctgcctc 240
agcctcccaa gtagctggga ttacaggcat acaccaccac gcccactaa tttttgtat 300
ttttggtagg gcggggtttc accatgatgg ccaggttggt tttgaactcc tgacctcaag 360
taatctgccc acctcggcct cccaaagtgc taggattaca ggagtgcagc actgcgcctg 420
gcccactttt ctttctttcc ttcttatttt gttatgctgg cagccatttg cccctgcatg 480
gtatgggata aaanangana gcctttcctc cctcaccttc tccaaatcta ggtgaaatca 540
cagantacaa ctctgagaaa tgctgaatgt gtaaagttgc agangggata 590

```

<210> 2721

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2721

```

agtctccgcg ctgctgaggc gcgcccggcc gctcccacgg cctcccctcc gccctgcggt 60
cccgccgcct ccggggcctc ctgggacctt ggccctcgcc gggcaggacg ccgccagcgc 120
tgaaggcgca gcccggaggc cgcgcgcatg cagatctgtg gatccagcgt agcatctgta 180
gcagctggga catcattcca ggttttgggc ccggtgtgtt ggcaacaact ggatctgaag 240
atggcagtca ggggtgcttg ggggtgtctc agcctgctcc gagtgtgtg gtgtctcctt 300
ccgcagacgg gctatgtgca ccagatgag ttcttcagtt cccctgaggt gatggcagag 360
gacatcctgg gcgttcaggc cgcgcgggcc tgggagtttt accccagcag ctctgcccgc 420
tcggtgctct tccccctgct gatctctggt tccaccttct ggctgctcag gctctgggag 480

```

gagctggggc cgtggcctgg cctggtgagc ggctatacgc tgctggtggg gcctccactc 540
 ctctcactg ccctttcctt tgctctggac gggccgtgta ccacctggcc ccgccgatgg 600
 gggccggatc ctggaacccc nggccctnct gtcnggttcc caacttcacc tgggtctcct 660
 acaacaagga acttctccaa ccaccatt 688

<210> 2722

<211> 894

<212> DNA

<213> Homo sapiens

<400> 2722

attgaagcct acaaccatgc aaagtgcagt gctgagaatg aggaagacaa aaaggtcatc 60
 tcattacagt tggataaaga tcaccacgct ttatatgtgg cgttctctag ctgcattatc 120
 cgcaccccc tcagtcgctg tgagcggttat ggatcatgta aaaagtcttg tattgcatct 180
 cgtgaccgct attgtggctg gttaagccag ggatcctgtg gtggagtgc cccagggatg 240
 ctgctgttaa ccgaagactt ctttgctttc cataaccaca gtgctgaagg atatgaacaa 300
 gacacagaat tcggcaacac agctcatcta ggggactgcc atggtgtacg atgggaagtc 360
 cagtcgggag agtccaacca gatgggccac atgaatgtcc tcatcacctg tgtctttgct 420
 gcttttgctt cgggggcatt cattgcagggt gtggcagtat actgctatcg anacatgttt 480
 gttcggaaaa acagaaagat ccataaagat gcagagtccg ccagtcatg cacagactcc 540
 agtgggaagt ttgccaaact gaatggcttc ttgacagcc ctgtccagga ataccaacag 600
 aatattgatt ctccnaaact gtatagtaac ctgctaacca gtcggaaaga actaccacc 660
 caatggaaat actaaatccc atgggtaatg gaccatcnaa nggccacccc ccaaaattng 720
 gtgctcttcc ctactccng aattctacac ccggtgcttc caccaaaaaa aaaccggcn 780
 gggccatgaa aaaaccccct ccagaaaaan ggccntggn ccttgggaac ttccaaagga 840
 aaaaaaacc cccagtttt tcccgtccn aattcccccc ccccntttc ccca 894

<210> 2723

<211> 618

<212> DNA

<213> Homo sapiens

<400> 2723

```
gcgcgtaatg gcagcgccgt ggcctcgcgt ccattctttgc cgttctctcg gacctgtcac 60
aaaggagtcg cgccgccgcc gccgccccct ccctccggtg ggcccgggag gtagagaaag 120
tcagtgccac agcccgaccg cgctgctctg agccctgggc acgcggaacg ggagggagtc 180
tgagggttgg ggacgtctgt gagggagggg aacagccgct cgagcctggg gcgggcggac 240
cggactgggg ccggggtagg ctctggaaag ggcccgggag agaggtggcg ttggtcagaa 300
cctgagaaac agccgagagg tttccaccg aggccgcgc ttgagggatc tgaagaggtt 360
cctagaagaa ggtgttcct ctttcggggg tcctcacaa gaagaggtcc ttgggggtcg 420
cccttctgag gaggctgcgg ctaacagggc ccaggtgaga ggcagctatc tatctcctgg 480
ggtggctcct ggtaccgatg gagtcctgac ctactcaggg gtgcccgga tagaaagggt 540
agatgaaggg acgctttagg agggttcttt ttgtggagtt taccgtctag gtggcncgga 600
tgangcntac ctccccca 618
```

<210> 2724

<211> 647

<212> DNA

<213> Homo sapiens

<400> 2724

```
ttgagcaaca ataagaaatt gagtgaanaa acgcaaaata cgtcattatg ttctggaact 60
gtagttcatg gtagacgttt tcatcatgct catgcacaga taccagtagt aaaaacagca 120
gcccaaagca gtctggaccg aaaagaaagg aaagaatacc cacctcatgt ccaaaaagtt 180
gaaattaatc ctgtaagggt aagtcggctc caagggttg aacgtataat gaagaaaaca 240
gaagagtccg aatcacaagt ggagcctgaa attaagagga aagtacaaca gaaacggcac 300
tgtagtacct atcagcctac tcctcctcta tctcctgctt caaaaaaatg ttttaacccat 360
ttagaggatt tgcaaagaaa ttgcagacaa gctattactt tgaatgagtc tactggacca 420
```

ttattaagaa cgtnattca tcagaattct ggaggacaga agtcacaaaa cacaggatta 480
 acaaccaana agttttatgg caacaatgtg gaaaaggttc caattgatat tattgtgaat 540
 tgtgatgaca gtaaacgcac ttatttacag actaatggaa aantcatttt acctggggcg 600
 aaaatacccc naatcncnaa cttgaaagaa aggaaaacna gtttgtc 647

<210> 2725

<211> 570

<212> DNA

<213> Homo sapiens

<400> 2725

atcactcaag atggctgccc ccatcaagat gaccgggggtg tgccgggggg aaaggggcag 60
 catgatggtc tgagatgggtg tagcgtcgga ccatgtggaa gtttctgagg ctggggagcc 120
 ggataatggg ggggtggggcc cgttgggggg taaaggggca atagcgtcct ttcacaggct 180
 aacctcggct cttcccagtc ctctggacta aaatggggaa cacattgggc ctggcaccaa 240
 tggggacttt gccccgccgg agccccgcc gagaggaacc cctgcccac cctgggaact 300
 tcgatgagct gcaccgtcta tgcaaagacg cagcaggcca agttcctgac atggcagttt 360
 gatggcgaat atccgggaga tgactacaca gccactctga ccctaggaaa tcctgacctg 420
 attggggaat ccgtgatcat ggttgctcac ttctgcaga acctcactca tcggctggtg 480
 ctgggaagga agactagttt atnccgggc ggccaggcga aganggggcc atcttgacct 540
 tggctgggaa gtactccgct gttcactngg 570

<210> 2726

<211> 623

<212> DNA

<213> Homo sapiens

<400> 2726

atatcanana agatcctgct gcggctactc aagtaccag atgtcattca ggaactcaag 60

tttgacgagc acaataagta ctacgcccgc cattacctgt acacccgaaa taagccggcc 120
gactacttca tectcatcct gcaggggaag gtggaggtgg aggcagggaa nganaacatg 180
aagtttgaga cgggcgcctt ctctactat gggactatgg ccctgacctc ggtcccctct 240
gaccgttccc cagcacaccc caccacctc agccgctcag cctccctcag ttaccagac 300
cgcacagacg tctcaactgc agcaaccttg gcaggcagca gcaaccagtt tggcagctct 360
gtcctggggc agtacatctc tgacttcagc gtccggggcac tcgtggactt gcagtacatc 420
aagatcactc ggcagcagta ccagaacggg ctgctggctt ctgcatgga gaacagccct 480
cagtttccca tagacgggtg caccacccac atggagaact tggccgaaaa tctgancctgc 540
ctgtggtgga cnaaaccaca actcttctca acgancgttn ctcttgctg cacaagcct 600
cccacgaana atgccatctg aca 623

<210> 2727

<211> 649

<212> DNA

<213> Homo sapiens

<400> 2727

cctgtcgccg ccgcctcggg cgggtgggct gactggcggc aggcctcgccg cggcgcgag 60
tcccggctgc gggatagacc gagggccatg gccgcctctc ccggacccgc cggcggttggc 120
ggcgccggaa cantctacgg ctccggctct tcgggcttcg ccctcgactc gggactggag 180
atcaaaactc gctcggtgga gcanacncta ctcccgtgg tttctcanat caccagcctt 240
attaatcata aagatnatac caaaaagtct gataaaactc tgcaagcaat tcagcgtgta 300
ngacaagctg tcaacttggc agttggaaga tttgttaaag taggagaagc tatagccaat 360
gaaaactggg atttgaaana agaaataaat attgcttgta ttgaagctaa acaagcagga 420
gaaacaattg cagcacttac agacataacc aacttgaacc atctggaatc tgatgggcag 480
atcacaattt ttacagacaa aacaggagtg atnaaggctg caagattact tctttcttca 540
gtgacaaaag tgttgttgct ggcacaccga gtntcnttaa acagataata acatccaaaa 600
aataagggtc tcgccactat gggaaagact aananaaagt gaatancctt 649

<210> 2728

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2728

```
tcattgaaga aatagttgag gatggacaac cggaaat ttt ctacacattt tggaattcag 60
ttactcaggc actttcttct caatttcata tggcaacaaa ctcttcgatg tttttgaagc 120
aggcatttga aggagaatac cctaaattat tacgtcttta taatgactta tggaagcgtc 180
ttcaacaata cagtcagcat atccaaggga attttaatgc aagtggaaact acagacctct 240
atgttgacct acaacacatg gaagatgatg cacaagatat attcatacca naaaagccag 300
attatgatcc agaaaaggct ttgaaagact cactacaacc ctatgaggct gcttatctat 360
caaaatcctt atctcgactc ttcgatccta tcaacttggc ttttcccccg ggtggtcgta 420
atcctccttc ctctgatgaa cttgatggta ttattaaaac tatagcaagt gaactaaatg 480
ttgctgctgt tgatacaaac ctcacattag ctgtgtcaaa aaatgtggca aagaccatcc 540
anttatacag tgtaaaatca gagcagcttc tctccacaca aggagatgca agtcangtga 600
ttgggcctct tactgaagga cagagaanaa atgtggcagt tagtgaattc cttgtataag 660
ttgccccaat cattaacaaa ngttgtttcc antcaganct cattcccact gggcagcttn 720
aacaaactta taattttcag ctcctaangg ctattc 756
```

<210> 2729

<211> 590

<212> DNA

<213> Homo sapiens

<400> 2729

```
tgggaacaga agaagattga caaattgatg atagagacag ttgaccctga caataggtct 60
aaatttggag tgaacattat actgggaatc tcttttgctg tttgtaaggc tggagctgcc 120
gaaaagggat tctccctgct gtcacagaat tgtgaatttg ctggcaattc tgaaggcatc 180
```

ctgctagttc cagctttcac tgtgaccggc aatggttctc aatctggcaa taagctggca 240
gtataggagt tcataatctt ccccgtcagc aaacttcagg gaagccatgc tcgttagagc 300
caaggcttag cacacttgag ccgtgtcatc aaagagaaat gtgagaaagc tgctgccaat 360
gtgggggatt gtggtangct gcataatgtc tcctaaagat gtccatgtcc taatccctgg 420
aacttgtgaa tatactactt tacttggcca aagggatttg canatatgat taaggttatg 480
aaccttaaaa cggggacatt atcctgtatt atccanaang gtccagtgtg atcttatgag 540
tccttaaaan cagaaaaaaa anccttttat gtctgtggtc agaaaagtcn 590

<210> 2730

<211> 679

<212> DNA

<213> Homo sapiens

<400> 2730

gtgaaactct gaaagtcctt cccaaaaaga tggaagattt aactaatgta tcaagtctac 60
tgaatatgga aagggcacga gacaaagcta atgaagaagg tctggcatta ctacaggaag 120
aaatagataa aatggtagan accacagagt taatgactgg gaatattcag agcctaaaga 180
acaaaattca gattctggca agtgaggtgg aagaagaaga ggagagagta aaacagatgc 240
atcaaataaa tagtagtgga gtactctctc ttccggaact ttctcanaaa actctcaaag 300
caccacact tcagaaagaa attttggcgc taattccaaa ccagaatgct cttctaaagg 360
acttgatat tcttcataat tcatcacaga tgaagagcat gtcnaccttc attgaagaac 420
ctataagaaa ctggatgcat cttaaagagt gtttttttt tagattgttc catattaatt 480
taatgttcgt gaatttgtaa aactgttaac ctatgattat atgtacagag gctaaggctt 540
ctgcaggatt tattatctcc tgatatgcct ttaaaattag tctttgtagt tctatcatta 600
acatctaata tagttctgaa gactgttttt ancanttgnc anatctagga aaactaacgt 660
ttatattgct gtnatctat 679

<210> 2731

<211> 626

<212> DNA

<213> Homo sapiens

<400> 2731

```

aaccactacc acgtcccca gtcgaacggg acccacggga actacatgtg tggggcaggg 60
tgagcgtgga aaaaggagcg cggatggggg tgcgctttgc aaacgatctg gagactgctg 120
tgtgttgagg gaagatacga agtcgcggga gcagttgggg actcaatgtg tgggcaacaa 180
gggtcctgct gagctcagga gctgcacgga atgggtggcag tcaccttgcc agtgcagcag 240
gcatggatca gactgcaagc taggggcacg aggcatacagt tgggaagagg ggacgcacag 300
ctaggcttga ggcctcttca tcgggatgtc cccaggcccc ccagcccagg cccagcataa 360
aggccgtgtt ggggggcccc cctgacccaa ggggggcttc atgcgccacg tgcaggcgga 420
gccgtctcca tcctcagagc cggaggctgg cccttcacag cctccagtca ggcagggggc 480
cctccagggt ggcctgctca tgggctacag cccagcaggg ggggcgacat cccccggggt 540
ctaccaggcc cctgccccac caagcgaagg ctgcttcctg ctggaaaacc ccanatntct 600
ctctgaagaa aaagggccan cccctc 626

```

<210> 2732

<211> 675

<212> DNA

<213> Homo sapiens

<400> 2732

```

aaaagaaaaa agagagtatt aaaatttctc attgtaaaat ctatatTTta gaatcactct 60
acaatataag caaataatgt gttttttact gattacatgc cttttttttg gggggggggg 120
gttctttttt tttganacag ggtcttgctc tgtcgccag gctggagtgc agtggcgtga 180
tganacttca atgcagcctt gatctcccgg gctcaagtga ttctcccgc tcagcctccc 240
aagcaactgg gaccacaagg tgtgtgccac catgcctggg taattttttg tttttttgtg 300
ganatgcggg tctcactgtt ttccangctg gtctcaaatt cctgggctca agtgatcctc 360
ccacttcagc ctcacattgt tgggattaca gtcacnaacc actgtnccca tccatatgtc 420

```

attctttana cacactactt actaaatttc tctttttaaa gggatatact gaatttccgg 480
 ttgaagccaa cttaactgct aattttctat tttagcttta aaacattgat aagcaacatg 540
 aancaatcta gaacttaacc tttaaatggc tttattaaag aaatccccta tgaaaatcnt 600
 gcaaaatgat tattttacnaa cnatcctacc cagcacataa naaatcctc ctcnattctg 660
 aaataccatc ttctc 675

<210> 2733

<211> 466

<212> DNA

<213> Homo sapiens

<400> 2733

aagctaaaac ttttatgcac gtaaaattgt cttctccatg gaagacgtaa taattcactc 60
 tgtttttagt aaaagttgca ataaaccata gaccctaagt caaattataa acaagaaaga 120
 gttaaacgta actgcaattc ttcttatagc actgggtccc tattcttcag tactgcagag 180
 tgaaagggca gatgaaaact tttacagtcc aactttatct aaaaacctta agtacaatc 240
 aggggtgattt gcaaagccat ctcagcagaa gtcaatgtag ccattccctg atgggtggct 300
 cttttcttcc tgtgtgtgaa attcctatct agtaagcatt gagcacggaa cgaggtctgg 360
 ctgggcttgt ccaggancct tgtgagggtg catcacagaa tggggctgtg tgatcatcca 420
 antgtganan caagggtcgg tganctgcct gtattgcccg tgcaga 466

<210> 2734

<211> 605

<212> DNA

<213> Homo sapiens

<400> 2734

atcagtgggc cagagctcgc cgggtggccg caagtacgcc ggcccagccc gcagcgcgcc 60
 cagccggaag gcggggaatc cggctgacac cgcgccccgg gttcccaggc cacctcctct 120

gttctgaggc tgggctggga naccgtgggg ctgtgaggag cgcatanaac cgtggtggag 180
 ggcgaggctg ggccaccggt tcttcaagct cggaatggag ggggaagagc gcagagggct 240
 ggctgggagg aactcgggtg ggcgtaagg agacgagggc nagaaaagaa acttcccttc 300
 ttccaggaag ggtcttcgaa accctctccc cacagcccct ctcgtcatta gcatggcaat 360
 gaggagtttc tgtaattcna cttggagggg cggtatgatcc cttggaaact cananctcgc 420
 cgaaaaagcc gggggcggcc gggctcttct tccccacctt cctctctcgc tcgctctccg 480
 cccctttctc tttcccactc agttttgcac cgggganccc tccgggatgc ggaactactc 540
 naccgcccga atttttangg gttaggaagc ggggggaaaa aaataacnct ggcngacttg 600
 cccac 605

<210> 2735

<211> 738

<212> DNA

<213> Homo sapiens

<400> 2735

aatagaaaac gatccagatc agagagtgac agtgagaaag ttcagccact tccaatttct 60
 accattatcc gaggcccaac actgggggca tctgctcctg tgacagtgaac acgggagagc 120
 aaaatttctc ttcaacctat agcaactgtt cccaatggag gcacaacacc taaaatcagc 180
 aaaactgtac ttttatctac taaaagcatg aaaaagggtc atgaacatgg atccaagaaa 240
 tctcactcta aaaccaagcc aggtattctt aaaaaagaca aagcagtaaa ggaaaagatt 300
 cctagtcatc attttatgcc aggaagtcct accaagactg tgncaaaaa accccaggaa 360
 aagaaagggt gtnaatgtgg gcgtgctact caaaatccaa gtgttcttac atgccgaggc 420
 caacgctgcc cttgctactc taaccgcaaa gcctgcttag attgtatatg tcgtggctgc 480
 caaaactcct atatggccaa tgggganaaa aactggaggc atttgccgtg ccanaaaagg 540
 cttggagcag accangetca ctttgggcat taacgtgact ancattgctg tgcgtaacgc 600
 tagtaccagc accagtgtaa taaatgtcac aggggtccca ntaacgacnt ttttagctgc 660
 cagtacacat natgataaaa atttggatga aactatnaca tganatccac tgtttaaatc 720
 cgtgggtctt ttaaaacc 738

<210> 2736

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2736

```
gtcacttttg aagaatggtg ggacagtaga tggtagcagt tgatttttca ttttctaact 60
ttgcagaata aaaattgaat gatcctgtat tggtagccca agtatttcag agtcccgga 120
gtctgggaag tgccatggtg aatagtcaca caggccagat gagagactga ggtgtgcatg 180
ttctgtggga ggggaagtgt agcctgcggg tgtggaatgg tctgggtggc cgtgggaaac 240
gtgganagag ccctggaaac agccccgctt tgtgccagtg aggagtcggg gaagcagctg 300
gggagacggg gctggagagc ctggggagag gggaagctct tctggaggga gtgggtgcac 360
cggcgcaactg cgcagcctcc tagtaaaggg cctgcagacc cagctggcct catgcctgga 420
ggccttangg gactctgang aaggcagttc cagaacagtg agtcaggacc agatgcagtg 480
ggttgcaagt agaaccagga ncaganactg gatgtggtgt attgtttcan aaccttccan 540
cgtgagtact accatatgga taccttagcg tgggaagcgc ccaggccacc cccggtccgg 600
gtnanaaaaa gcccanaact ca 622
```

<210> 2737

<211> 661

<212> DNA

<213> Homo sapiens

<400> 2737

```
accgancagg aatccgtatc tgggaacagg tganagatga tgtgtgctgg gccttgagg 60
aagggggccg anaccgggcc ttacttctgt aacgatactg tgaggcatcg gaaggccagc 120
ctgttgtgtc cgttttgaag gtcggtgggc tagactggct ggccttctag ggggtgtggag 180
acttcccaac tctgcccttg tgctttcctg gaatcccaa tatgcccgga ccccggttta 240
```

ctccctttgct gcgagccctt ctctcccgct cagagttgct ccgagcctat ctgctcagtc 300
 ctacgcattc ctgtggggct tgggacgcgc ggttcaagca ccccggaaca tatggatgca 360
 gcacccatgg gttctcgctc caatgcttct ttcctccttg gggcgtaact cagaccctgg 420
 gcacccctct ccaactgccca ggggagacct gggttctaga tttggctctg cctctactat 480
 cticctacct cctanaacct cagtttggct tgtgtaaaaat angatgactt aagggtcctt 540
 tcagccccta atcctggggg actttactct gtaccgcctc cttaccacgc cttgtgcaac 600
 ccactctgaa ngcactgaat tctancctgt ttattgtaan tgggtgattaa nttgggtctc 660
 a 661

<210> 2738

<211> 715

<212> DNA

<213> Homo sapiens

<400> 2738

attggacatt atctcaagat gaatatcacg gtaccagagg gattacatca acgggtttat 60
 tcgggccaac aataccttcn ctctatcagc tagtttttga tcccatcaaa aggaaactta 120
 ttcctctgaa cgcctatgaa gatgatgttg atcctgaaac actaagctac gctgggcagt 180
 atcctttctg aaacagaatg gtagaatttg tgcatttttc ttcaatattt ttatggtgat 240
 ttttttgtga ggcatttagt aaaaagcttg cacattattt tttgctctct tttttatagt 300
 gaaatctgta tattgttcat ttaaattacc atgctagtga aaattgagaa caactttttg 360
 tttataaacc cgaggctcat ccaactatgca tcctgattac ttagattgac tgacagaagc 420
 atgcacaggg tccgtcactt acggtacaca ttccaaaggt ggctcttgag aggacctcct 480
 cgtggcaagc aagctcgact tatcaggaag ancattcttg gcatttgagt gcatcaggag 540
 aagatgccct tcccatagcc actggccatg ttcattgcagg ctgatgcaga nccctganc 600
 acttaagtgg tggctaagac tttccctctt gtttccctta aggaaggaa tcagtgatgg 660
 gcctgggncc ttgtcaaaaa anaccaactc ctgcggaaga cagatngana ctanc 715

<210> 2739

<211> 755

<212> DNA

<213> Homo sapiens

<400> 2739

```

atagggaaaa tattgccagc gttttcagtc attctgtgca tgctgcttta agcaagagat   60
ttatatattgt tgagaggaaa tattgctact tcctgcactt ccaccctctg cagccggcac  120
cgtccctact gttgccatta attggagctg tccttaagat ggtcaccata ttcttattca  180
ggctgttgtc attttcccca gagatggttt gtttaacgaa tgataggctc tgtgcctggg  240
gatgttagca gactctgggg tttgtacagt gatgccttct ccctggccca gagctgaata  300
ttcatctaga attaaagttg gatttgatat aacaaatttc tttctataca ggttttacat  360
aagagagaca gtaataatgt caaggatagc ctgtgtgggc agaaattggg agtcgtgctt  420
ttgaatgtca gctgtagagc caactctgat tatctagcca ttgatcatac aaattgatag  480
aaacattagt cagtaatttt agcttcttgc caaattgttc acaacatcta aatgtaatgg  540
tgatgtgatg aanataagta gtacaaagan accaaaataa tttggggaga attangaatg  600
atgacaattt tttttaacaa cttacctcta ataaggttac ttgggatgaa ccaactcanc  660
ttccttccca tggatangaa aggactctgt gtnttattcc ngttttattgg cacaaaaata  720
cttgttttta aanttccctg aaaaaccctt gatgg                                     755

```

<210> 2740

<211> 804

<212> DNA

<213> Homo sapiens

<400> 2740

```

attcttgcac agcagtgtga aaatgggtgca tggaaatata actcctgaaa atataatttt   60
gaataagagt ggagcctgga aaataatggg ttttgatttt tgtgtatcat caaccaatcc  120
ttctgaacaa gagcctaaat ttccttgtaa agaatgggac ccaaattttac cttcattgtg  180
tcttccaaat cctgaatatt tggctcctga atacatactt tctgtgagct gtgaaacagc  240

```

cagtgatatg tattcttttag gaactgttat gtatgctgta ttttaataaag ggaaacctat 300
 atttgaagtc aacaagcaag atattttacaa gagtttcagt aggagttgg atcagttgag 360
 tcgttttagga tctagttcac ttacaaatat acctgaggaa gttcgtgaac atgtaaagct 420
 actgttaaata gtnactccga ctgtnagacc agacgcagat caaatgacaa agattccctt 480
 ctttgatgat gttgggtgcag taacactgca atattttgat accttattcc aaagagataa 540
 tcttcagaaa tcacagtttt tcaaaggact gctaaagggt ctaccaaaaac tgcccaagcg 600
 tgtcattgtg ccagaaaatt ttgccttggt tgacttcana atttgtnaac cctgacatgg 660
 tancctttgt tttgcccaat gttctactta ttggctgaag gaatgcccc aaanaanaat 720
 atgtctaatt taattccttc ctgaactttg ggccccgtgt ttttaagcccc aggancccat 780
 ccnnaatttg gtttattttt ccca 804

<210> 2741

<211> 652

<212> DNA

<213> Homo sapiens

<400> 2741

ttctatgtaa gagcaagcga gttccacagc gcggggaggc cagtggagag gancgcggcc 60
 ttgcctggct catgtcctgt ttccagcttg ccctgaaaac gaattactaa atccatggag 120
 gaanagcttg gggcctgcct ggctcctggc cacggtgggg ctggggcctg tgactgcgtg 180
 tgcagagggt ccgcgcccag ggcccgggaa aggggctgcg ctgccccgag cgantccccg 240
 ggcgccccca gcctgctgca gccacctgg gctccacatt tcggccccct ctcctctccg 300
 ctgctctggg ctcanccacc aagctccacg ctgtgggcag aatccactgg ggcgcangaa 360
 acctcagctt ccgcagccca cctggccttc gcagtcttcc tctccagggt tttatttcaa 420
 catggccttt tctgctgcga ctcaactgtg gtangggcca agtttggtg tgtgaagcca 480
 nggaagtgcg ttgtgttctc ncggaaaaaa aaaacgcanc ganggaccg ggcacacgga 540
 ccagctcacc aaccgcagcc aaaccaccaa ttctgtcccg tggcccttgg gtgaacggtg 600
 acanggaagg aaagaaacnt ggncagcttc cnccaganca caggcgaaaa ca 652

<210> 2742

<211> 610

<212> DNA

<213> Homo sapiens

<400> 2742

```
tccggtgctc agtggctagc cgaatagccg tgtttgggac ctgggctcgg gcttcttgcg 60
tccctgctaa naacatgtca cggggccgaa tcgtccgtat tctctcagct tcaagctcct 120
ctacttttca accaggtcac tagcccttga ctctcttat caaacttccg gaactgccac 180
cccaccagtg actccacagg caccagggca tgcaacaggg ctgggacagg aaggctctct 240
tcttcacctc aagcctgctg ggctaacact tgcgattttt actanagtta actttgtaat 300
gtatgtctct gactctagaa tttcaagaga agttccactt agtgactcct aagtggaagt 360
tctaagatgg ctccccagtg aggtgatgaa naagtttgag ctttanantg cagttgcaaa 420
gctctttctc gacctgaaca atggctgting ctgtggacca acaaatccag actccttcag 480
tacaagatct ccaaatagtt aaactggaag aagattccca ctgggagcag gaaatttccc 540
ttcnagggaa ttaccctgga ccananacat cctgccagan cttttggcat ttccgttacc 600
aagaancatc 610
```

<210> 2743

<211> 857

<212> DNA

<213> Homo sapiens

<400> 2743

```
acacgcagct agccggagcc cggaccaggc gcctgtgcct cctcctcgtc cctcgccgcg 60
tccgcgaagc ctggagccgg cgggagcccc gcgctcgcca tgcggggcga gctcagcaac 120
aggttccaag gagggaaggc gttcggcttg ctcaaagccc ggcaggagag gaggtggcc 180
gagatcaacc gggagcttct gtgtgaccag aagtacagt atgaagagaa ccttccagaa 240
aagctcacag ccttcaaaga gaagtacatg gagtttgacc tgaacaatga aggcgagatt 300
```

gacctgatgt ctttaaagag gatgatggag aagcttggtg tccccaagac ccacctggag 360
 atgaagaaga tgatctcaca ggtgacagga ggggtcagtg acactatata ctaccgagac 420
 tttgttgaac atgatgctgg ggaaacgggc ggctgtcctc aanttagtca tgatgtttga 480
 agggaaaagc caacganagc agcccnagc cagttggccc ccctccagag anaaacattg 540
 ctancctgcc ctgaggaccc gcctggactc cccagccttc ccacccata cctccctccc 600
 gatcttgctg ccttcttgac acactggiga tctctcctc tctcattttg ttttggtent 660
 tgaanggttt tgtttgtgtt ttcctcaat gtcttttgtt aaagcccaa atttatctgc 720
 ctttaaaagg ggctctgggt tccggggaat cctgaacctt ggggttccct cctctcttct 780
 tccctccttc ccccgntccc tgtttcaaaa agggtgaat ttccanccn nnaaccttta 840
 aaagggggca gggcccc 857

<210> 2744

<211> 586

<212> DNA

<213> Homo sapiens

<400> 2744

gtgtgagggg ctcttcacgt ggggaaggaa cagcaggcgc ggagganggg gcaagcgtgt 60
 gtgagattca gtggtccatg cgtgcgtttg tcgtgtaagg gtcattcctg gggtttgag 120
 tgggggaaca aatcaatgtg gctgtttttc cgtggaaaga attcccactg cagtgtcccg 180
 gancctgcgt gtggtgggca agctcctcaa atggtatctc acagggaata ggggagtctt 240
 gaaaacgcag cttcggcagt aggaacatga acctcttacc taaaagtcc agggantttg 300
 gctccgttga ctattgggan aagttcttcc agcagcgagg aaagaaagct ttcgagtgg 360
 atggaacctc cctggaactg tgcgggggtgc tacataaata tatcaagccc agggaaaagg 420
 tgctggtgat tgggtgtggc aactcanaac tgantgagca actgtatgat gtgggctatc 480
 gggatatant gaacatccac atcngtgagg ttgtcatcaa gcaaatgaan gaatgttatg 540
 ccaccnacc gcccagatg ancttcttga agatggacat gacgca 586

<210> 2745

<211> 633

<212> DNA

<213> Homo sapiens

<400> 2745

```

gcggcgggat gaggagcttg aggaagcagg caggggaaat gtctgccgcc gccagctctc   60
ggggagcgca acactgcagg tggttctaac tttgatggtt tgagaccaa tgggaaggga  120
gtgcctatgg accaaagctc caggggtcaa gataaaccan aaagcttgca accaagacag  180
aataaatcca agtccgaaat tactgacatg gttcgctcct ccactatcac agtgtcggac  240
aaggctcata ttttatccat gcagaagttt ggactgcgag atacaattgt gaaatcncat  300
ctactacaga aagaaganga ttacacctat atccanaact tcaggttttt tgcgggaaca  360
tacaatgtna atgggcagtc ccccaaagaa tgcctccggc tgttgctgaa caatggtatc  420
caagccccan atgtctattg tgtanggttc cangaacttg atctgagtaa ggaagctttt  480
ttcttttcag atacccccaa ggaagaanaa tggttcaaag ctgtgtcaga aggtcttcat  540
ccagatgcca aatatgccaa ggtgaagctt atcccactgg gttgggatta tgctgctgtt  600
atatntcaac aggancatgc ncttatatc tcn                                     633

```

<210> 2746

<211> 864

<212> DNA

<213> Homo sapiens

<400> 2746

```

gcgctccaag atggcggcga acgtgttccc gttccgcgac gcccggtgccg caccggaccc   60
agtgtctggag gccggcccgg tggcacacgg gccactgccg gtaccgctgg tgctggacaa  120
cgggtcgttc caagtccgcg ctggctgggc gtgtcccggg caggaccag gtcccagacc  180
gcgcttcag ttccgcgcgg tgtgcgcccc cggtcgtggc ggggcacggg gcgcgtcggg  240
cccgcaggtg gggaacgctc tgggcagcct ggagccactg cgctggatgc tgcgctcgcc  300
cttcgaccgc aacgtgccgg tcaacctgga gcttcaggag ttgtgtctgg actacagctt  360

```

ccagcacctg ggtgtctcct cacagggctg tgttgatcat cccatagttt tgacagaagc 420
 tgtgtgcaac ccactgtatt cacggcaaat gatgtctgag ctctcttttg agtgctacgg 480
 gattcccaag gttgcctatg gaataaacag cctcttcagc ttctaccaca ataagccaaa 540
 gaactcgatg tgcagtgggc taatcatttc atctggatac caatggttacn catgttttac 600
 ccatcttaga aaggaanatt agatgctaaa aaacttgcaa gccgcatcca tctttggagg 660
 aaaccaanca acttnggttt actcccagcg tctccccca gcttaaaatt acccctgggg 720
 cacctgggca ngccatcacc cctccagccc gccatgggaa gaaaaattct gccttnaaac 780
 acaaaccttc cntcccctta aaagaattaa tgttnggaaa aaaatttacc cccaaattgg 840
 cgggtgttcc ntgaatttnt taat 864

<210> 2747

<211> 553

<212> DNA

<213> Homo sapiens

<400> 2747

agttggcgcc catggagcca gagctgctgg ttcggaaggt gtctgcattg caggcctgcg 60
 tccggggctt cttggtccga cgccagttcc agagcctgcg agctgagtat gaggcgattg 120
 tacganaggt cgagggcgac ctgggcacgc ttcagtggac cgagggccgc attcccaggc 180
 cgcgattcct cccagagaag gcaaaatccc atcagacctg gaaagcagga gacagggtag 240
 caaatccaga gcaggggctg tggaaccact tcccatgtga agagtctgag ggagaggcca 300
 cctggggagga gatggtgctg aagaagtcag gagagagctc agcaaatcaa ggaagcctct 360
 gcagagatca cagctcctgg cttcagatga agcagaacag gaaacccagc caagagaaga 420
 ccagagacac gacnaggatg gaaaatccag aagccacnga tcaaagactg cccacagcc 480
 aacctennct tcaagagctt cagtaccacc ggcnccact tggccatgga attgctgtng 540
 gctgcgaccg gcc 553

<210> 2748

<211> 685

<212> DNA

<213> Homo sapiens

<400> 2748

```

aatgaaaaa acatgaaagg acttagcata atgttatitt atcttttcta caactttgtt 60
taaattacct ttccaaagat atttgtgttt atgtaatttt ccacggaata acattaatac 120
tctaggttta taaaccggtt tcacattatt tcatttgatc atcacaagag ctttgtgaag 180
taagccgaga agttgttact ggtattttaat aatagcaata gaggagttaa agactttccc 240
acagcttgca ggtcaagaca agaaattcag gtctcctaata tctcagtga gctctatttc 300
tgttaacca aattgctgct ctgttttagg tctcaatttc atctgtaaaa tgatactaata 360
agtacttata ccattggatt tttgttgaga tttaaataaa tagccaaaag ccaatacata 420
ataaacactc aataaagatt aaccataagg agagtcatga tctggttcca ggaatacatt 480
gttagatgac tgaaaaattg tattacttca atgaaaatac tataaataat aacattttca 540
tatattagtt ggttctcatg catacataat ctaattttat ttgatactca caactgttta 600
agttttatta aatatacatt atccctgttt ggtttaaatt agaaacntac natncctggc 660
ctgctttcnt tccacnaaaa ttatc 685

```

<210> 2749

<211> 556

<212> DNA

<213> Homo sapiens

<400> 2749

```

atgtagtaat ttgacctga tggttttgga tataatagcc aattcatcac ttgtgatttg 60
atgactctta gggctcttag tttttcttaa cagcctccaa attgaagttt cagaatcctt 120
actgcaaaaa gcacaaaagt ttccattgcc attttgatag tgatatgtag ctcgtaaata 180
ataattctta cctctgtgtt agataaaaca tccagtaaaa cagcatcaag tttagctttg 240
atagaaggga acaattagag ttgggtgtaga gacagaccag ttaggatgag ggcatgaaat 300
acagcagaag cagtaggaag agaagagaga ctgaggatct tgaattaggg tctagatgaa 360

```

aatttaggat gattcctacg tttgggaatg gagggagagc ttaaacaaga tagagaatat 420
 agacacagat tttggaggaa atgattttct caagggactg ctgagtccaa ggaatgttta 480
 caaatcctcn agaantactc caggctattt gtaanatctg angctcatag gccttttctg 540
 gctctcanga tttaaa 556

<210> 2750

<211> 747

<212> DNA

<213> Homo sapiens

<400> 2750

tatgttaaag tctgggacat gttaaaagga ggacaattgc tagtatcttt gaaaaatcat 60
 cacaaaaccg tgacatgttt atgtctaagc agctctggac agaggttact ttctggctca 120
 ctggatagga aggtgaaagt atacagcaca acttcttaca aagtagtcca cagttttgat 180
 tatgcagctt caattttgag tcttgccctt gcacatgaag atgagacaat agttgtagga 240
 atgaccaatg gaatactgag tgtaaacaat cggaatctg aagcaaagaa ggaatcactt 300
 cccagaagaa gaaggcctgc atatcgaacc tttattaaag gaaaaaatta catgaagcaa 360
 cgggatgaca ttttgattaa caggccngca aagaagcacc tanaattgta tgacagggat 420
 ctgaaacatt ttcggatctc taaggcactc gatagaattc ttggtccac ttgtacaata 480
 aagacacccg agattacggt gtccatcata aaggagttaa atcgaaaaag atccttgcaa 540
 atgcgcttgc angtcgggga tganaangaa atcagtcatg ttcttaattt tttgataagg 600
 aatctttctc anccaagatt tgctcctgtt ttaatcaatg ctgctgaaat aattattgat 660
 atatatctgc ctgttattgg tcagtcacct gttnttgat aaaaaatttt tactacttcc 720
 angacttggt naaaaaanaa attgatt 747

<210> 2751

<211> 570

<212> DNA

<213> Homo sapiens

<400> 2751

gtagatgcga	tggcgccgat	tccaaagact	gtggggcgga	tcaagctaga	ctgctctcta	60
cggcccagct	gcccactgga	ggtcgctgct	gcacccaaac	tttgcaagga	attcggtcca	120
gaggattacg	gcgaagagga	catagtggat	tttcttcgac	ggcttgtgga	gagtgatccc	180
cagggcctgc	accggatcca	tgtggatggg	agcagcgggc	ggctgcagct	gtggcaccat	240
gattacctcc	tgggccactt	ggatgatgaa	gggaaatcaa	ctggacagag	tgacaggggc	300
aagggggctg	agggactggg	cacctactgt	ggtctccgca	agtccttcct	gtatcctccc	360
caagagtctg	agccctgccc	tcaaagcccc	tctgcctctg	ccaccttccc	cagtgtctca	420
gacagcctgc	ctcaggtggc	catgccccag	aactcctggt	gacagaagag	gaagccaatc	480
gcctggctga	agaactggtg	gctgaggagg	agcgcatgaa	acagaaaagca	gaaaaaaagc	540
gactcnagaa	naacntccaa	aggaacggaa				570

<210> 2752

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2752

tttaaaatga	taaacctggg	tcagaggata	tttaggaaga	ggcattgtca	ttaagtccaa	60
gacaagatgg	tcagatttgt	tatcctagt	ggttacaatc	caaaatactc	tggagcatgc	120
tgagattaag	gtggttgcca	agggaacaga	aaacagccat	gagtaaataa	atcaagactt	180
taaaggattt	agatcgggtc	tatggccagt	tgcagagtgg	gcaggatctt	aagacccgat	240
aggtgcagaa	cccatctgga	cacggagacc	aggaatggag	ttccatggag	gcctggctgg	300
cactgcaccc	gggcatgagg	acacatccag	taagaagacc	tgcctcaaga	ggtgcactgc	360
ggtgaccagt	ggaggtgact	ggttggagcc	tggaattgga	agcanattcc	aagctctggt	420
ggacaaactc	tccaggcctg	gtgggaatca	cagctggggc	agacctcatc	ctggctgcct	480
ggccacaggc	ccccactctc	tgccactggt	ggtaggacna	tgcctgtgtg	gaaanctggc	540
ttctctgctc	ccgcctgggtc	caccacttgg	ctagaagttc	anaaacagga	aantgattgg	600

tctaagctta cnca

614

<210> 2753

<211> 592

<212> DNA

<213> Homo sapiens

<400> 2753

```

naaaaaaaaa aaaaaaaaaa aaaaaaaaaag gtttttgaan atggcggccc tcaaggctct 60
gggtgccggc tgtgggcggc ttctccgtgg gctactagcg ggcccggcag cgaccagctg 120
gtctcggctt ccagctcgcg gggttcaggga antggtggaa acccaagaag ggaaaacaac 180
tataattgaa ggccgtatca cagcgactcc caaggaaagt ccaaatcctc ctaaccctc 240
tggccagtgc cccatctgcc gttggaacct gaagcacaan tataactatg acaatnttct 300
gctgcttagc cagttcatcc ggcctcatgg aggcatgctg cccnnaaana tcacaggcct 360
atgccaggaa aaacaccgca agatcgagga gtgtgtgaaa atggcccacc gagcaggtct 420
attaccaaatt cacaggcctc ggcttcctga aaganttggt ccnaaaaaca aaccccaact 480
caaccggtac ctgacncnct gggctcctgg ctccntcaag cccatctaca aaaaaagccc 540
ccctggaaca aggtncccat tcccctgggg tccccttct gaagganaat tt 592

```

<210> 2754

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2754

```

gnaaatctgt acgaactatt caggctgctt ttagaggcat gaaagttaga caaaaattga 60
aaaatgtatc agaggaaaag atggcagcca ttgttaacca atctgcactc tgctgttaca 120
gaagcaaaac tcagtatgaa gctgttcaaa gtgaagggtgt tatgattcaa gagtggtata 180
aagcttctgg ccttgcttgt tcacaggaag cagagtatca ttctcaaagt agggctgcag 240

```

taacaattca aaaagctttt tgtagaatgg tcacaagaaa actggaaaca cagaaatgtg 300
 ctgccctacg gattcagttc ttccttcaga tggctgtgta tcggagaaga tttgttcagc 360
 agaaaagagc tgctatcact ttacagcatt attttaggac gtggcaaacc agaaaacagt 420
 ttttactata tagaaaagca gcagtggttt tacaaaatca ctacagagca tttctgtctg 480
 caaaacatca aagacaagtc tatttacaga tcagaagcag tgttatcatt attcaagcta 540
 gaagtaaagg atttatacag aaacggaagt ttcaggaaat taaaaatanc accataaaaa 600
 ttcangctat gtggaggana tatananccc a 631

<210> 2755

<211> 751

<212> DNA

<213> Homo sapiens

<400> 2755

atataaactc gacagcgagg gcacccccctg cgagtataaa accccccttca ggaggaacac 60
 cacgtggcac cgggtgcca ctcctgccct gcagcccctc tctagagctt ccccatccc 120
 cggcacgccc gaccggctgc cgtgccaaaca gctgctccag caggcccagg ctgccattcc 180
 tcgaagcacc tccttcgacc ggaagctgcc cgatggcacg agaagctcac ccagcaacca 240
 gtcctcctcc agcgaccctg gaccggcgcg gagcggaccc tggagaccac aagtgggcta 300
 cgacgggtgc cagtcccctc tactgctcga acaccagggc tcaggccctt tggaatgtga 360
 cggagccagg ggagaggga gacaccatgg aagcaagcag gcacccggaa accaaatggc 420
 atggcccacc ttccaaagtc ctgggttcct ataaagaaag agctctgcag aaagatggaa 480
 gttgcaaaga ttcccccaat aagctttctc acattgggga taaaagttgc tccagtcact 540
 ccancagcaa cacgtctcc agcaacacct ccagcaacag tgaccanaag cactttgggt 600
 ctgggganct gatggaaccc naattactgg ggggtgaacta catccaaagg ggctccaccg 660
 aaantgggat ccaaaccggc cccctgcatt gcttgccnca tcctccggcc tgttcacctt 720
 ggcaaggcan cangggccct gatteccanc c 751

<210> 2756

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2756

```
gtatcccggtg ctgtttccct ggcagacaca caggcgctca cgagtctctc cttgccagcc 60
tgcaggggcgg cgacccccaa aaccagccc cgggtcccaa cctaggcaag aagctgcttc 120
tctgccaaca gctcctcttc ggcctccgtc acagccacct ggaccctacc ctttcgcgac 180
tgctgctgct gctgcccgga cgtggaagca gcaagaggcg cttgggtcaag acacactgac 240
ggtacctaca gaatactgga catacggatt cagaatccat aaggctttat caccttgaat 300
caaggattta ttgatatca tcctcgggtc ttacttccta tcaagtaaca ttgttttgaa 360
aaatagagtt aacacatttg ccataaggga gttttttttt ttttttttta aatacttcgc 420
atactctcca atgccccaaa atagcaaggt ggtaaaaaga gaattagatg atgatgttac 480
tgagtctgtc aaagaccttc ttccaatga agacgcagct gatgatgctt ttaagacaag 540
tnaactaatt gttgatggcc aggaaagaaa aagatacnga tgttgaanaa ngatctgaan 600
tccaaaat 608
```

<210> 2757

<211> 773

<212> DNA

<213> Homo sapiens

<400> 2757

```
tgaaaatgac ctcgggaagg gccctgagcc agagtccgtc atcggttact ccgganaaga 60
tttaccaggt gccctaggtc gtttccgagt ccggcagccc aacctggaga caatcaacct 120
ggaatgggat catcctgagc atccaaatgg gatcatgatt ggatacactc tcaaataatgt 180
ggcctttaac gggaccaaag taggaaagca gatagtggaa aacttctctc ccaatcagac 240
caagttcacg gtgcaaagaa cggaccccggt gtcacgtac cgctttaccc tcagcgccag 300
gacgcaggtg ggctctgggg aagccgtcac agaggagtca ccagcacccc cgaatgagggc 360
```

ttacaccaac aaccaagcag acatcgccac ccagggtgg ttcatgtggc ttatgtgcgc 420
 catcgccctc ctggtgctga tcctgctcat cgtctgtttc atcaagagga gtcgcggcgg 480
 caagtaccca gtacgagaaa agaaggatgt tccccttggc cctgaagacc ccaaggaaga 540
 ngatggctca ttgactata gtgatgaaga caacnagccc ctgcagggca ntcagacatc 600
 tctggacggc accatcaanc agcagganaa tgaccaaagc ctggttggan tatgggcgaa 660
 ggtggcgaaa ggttcatttc aatgaaaaag ggtccttcat cggccaatta cncggtccaa 720
 aaagggacaa ggaagaaaac ctaaaggggc aacgaaaaan cttcaaaang ggg 773

<210> 2758

<211> 697

<212> DNA

<213> Homo sapiens

<400> 2758

tagtattaaa cattttcaaa gttacttgcc aacatctaga aagataccag gttttctata 60
 aaaaagaaaa ctggatttct ggatgcttct taaaaatcag gaagtctggc agcctgagcc 120
 cacatcggct ggagctgagc cgcacctgcg agttgcatct gggatctcca gttcaccggc 180
 ccctaagctc ctgagggttg gcctgaccct gaggttgcct gtcaatcacc atttcttccc 240
 tccactcctt gtgttacctg cctggtcctg cggggttggc aacaactcag gagcccacct 300
 cgggtggttt tggagggtgcc gtgcacactg ctgattggga ggctggacgc tgccagtctg 360
 tccggagttt cctttacccc tgagtagccc ccagactgaa ctggcagcga agtggaggcc 420
 acgatgcatg gttctcttga agctttgctc ttcctgcccc aaatcacctt gtcccttgcc 480
 cacgcccatt tgatctgctc aaatgcacaa ctggagatgt gtgtctttcc ccacaggttt 540
 cttggcgatc tcacaacaga aggaataaac aagccaggat tttaaaagg gccagccgg 600
 ctcccagggtt gaccctgaan cagcctgggg gaaccanaca ccaattgctt gctgggaagn 660
 aacaaggctc ggcaccntgc tgaacgaanc aaggaac 697

<210> 2759

<211> 751

<212> DNA

<213> Homo sapiens

<400> 2759

```

ggagctctaa attctcttta ttgtaaaaga gatgtaaagg ttttatattc taaatcctag   60
taaaattgac agtgatTTTT aaatataatg catcttcctt tgtctgctta gtaaaaaatt  120
tcatttcata attttgcaa gctctgtagt ggatccaaag tatctttgag ttcttgcaaa  180
ctacaagttg tttcctttcc anaaggcttg atttcattag gagacccctc tattgagttc  240
taaatagttt atcttagaaa gccttgggtc attcacaggt atccaaccag ccattgttta  300
gtttgttttt gaaggggttt gataatgctt ttttaagttgt acagaatgct taatccatct  360
tattactgtc ctgagccatg taatatgcct gcatcgtgtt ggggaaatgt ttgggaaata  420
taagccagca taacgtgtaa agctcactct ttcaccctgg aacagacaag aggtgggctt  480
aatagangca gagactgggg atataccttt gtttccttag catTTTTatt tatttatttt  540
tattttattt tattttttga gatgganttt cactcttggt gcccaggctg ggggtgcaat  600
gggcgccaat ctttgctcac tgcaaccctt gccctccgg ggctcaaacc gaatctcctg  660
gcctcaagcc tctcgaantt acttggggaa ttaacaggcc atgcgttcan ccactcccaa  720
nctaaatttt ggtnttttnc agtaaaaaaa a                                   751

```

<210> 2760

<211> 412

<212> DNA

<213> Homo sapiens

<400> 2760

```

ttgcccata tgggtcagga gaccctcacc catctttggc atgcacgtac tggcatcatg   60
tccaagactg ctgtgtaagg ggaggagata aatgaggaca cagacaact attaactccc  120
atattctggg aagtgacgtg tatcatttct actcgttggc cagaaatggg cagctggccc  180
taaggtaatg cagaaagatt tggaaaatta ggggagtaaa tgaaatattt ggaacncttt  240
caatccnagc agttcttaat gtttccccca ctatcatgct agcccattec accacctttg  300

```

cctgaaatac tgcaagtatc ctaattaatc ttctnatcc taatcatgct ccaatatgat 360
ctatgccttc tnccattctt gctacctcna actttttgtt ttccatctat ca 412

<210> 2761

<211> 769

<212> DNA

<213> Homo sapiens

<400> 2761

atggtgttca ccccaacttca tcagcgtaca taagttatct cttcttttgg acccttattt 60
tatgccataa tgcaacaagc tttagaacta gctttggatc gtgcagagta tgcattgaa 120
agtgcctgac agagacctcc taaaaggaaa tacctatcaa gtggaagaaa atctgtattt 180
caaaaacttt atgacttgta tattgaagaa tgtgaaaaag aacctgaagt taagaaatta 240
agaagaaatg tgaacttggt agagaagctt gttatgcaag agactttgtc atgttttagtg 300
gtcaatctat acccaggaaa tgagggatat tctctgatgc tcaggggaaa aaacggatca 360
gattccgaga ccattcgact gccctatgaa gaaggagagt tgcttgaata tttggatgca 420
gaagaattac ctctatttt ggttgatctc ctagaaaaat ctcaggttaa tatttttcat 480
tgcggatgtg tcatagcaga aatacgtgac tacaggcagt ccagtaacat gaaatctcct 540
ggttaccaaa gtcggnacat tctcttacgt ccaacaatgc agactttaat ttgtgatgtt 600
cattcaataa caaattgata accacaaatg gganccagga aagacaaact tttgctttga 660
aaanccagct catccctagc taccagctga ancactctgt ctigatccct cctatancaa 720
gtcccctggc actggcaaaa cagaactgct cttttnacca agccaaaaa 769

<210> 2762

<211> 649

<212> DNA

<213> Homo sapiens

<400> 2762

ttcacaactt tctgccttta aatctgggtc ctctcttcag cttcaccaag ccactgaatg 60
cttttcagtt ttattaaccc tcacattccc catccttctc agcaagagcc tctccttatg 120
ccatcagcat gtatatacat ttcctaggaa atttgatctt tcttgatcatt cttttttggt 180
tccaatcggc cttttcctgg ttctcaaagc tctagtttct tctaatttct ggatcatcgc 240
aagtctggcc ctctttgaac tttaaaacat aatgtctaata tccaccccaa ttttcagcat 300
ttcttcaact aaatcgataa agctgtctcc attatgagaa aggccagaat aatactccgg 360
gtaagcataa gaaagctggg cattttacaa cttctccga ctctaggaag taatatgatg 420
ccatttggtg agcatctaca gtgtgccaag cacatgggtc atctctgcaa actgctgcta 480
cattctgtaa agcaagtatt atccgcattt tagggattag gaacagcttc ctgatctctt 540
gccaaaagtc acagctagtg agtgggttag gcaagataca aaccctagtt agttaatcct 600
tactcagaag tgtataggac tatgatacat tgggtctcaag ctttnnnnn 649

<210> 2763

<211> 745

<212> DNA

<213> Homo sapiens

<400> 2763

caaaaaggaa attcagaaga aaatggataa gaagatgaag aaagctagaa agaaagcaaa 60
attacattct agcaaaggag aggaggaaga tcctgaggtt aatgttgaaa tgagtctgca 120
agatgaaatc cagcgggtga ctaatataaa aacttctgcc aaaatcaagt cttttgactt 180
gattcattca cctcacggag agttaaaggc tgtcttcctg ctgcagaaca acctggtgga 240
attgtattca ctgaatccat ccttgccctac tcctcagcct gtcaggacaa gcagaatcac 300
tattgggggt catcgcagtg atgtgcggac tttgtcattc agctcagaca atattgctgt 360
tctttcagct gcagctgatt ccattaaaat atggaacagg tctacactgc agtgtattcg 420
cacaatgacc tgtgaatatg cactttgctc attctttgta cctgggtgata gacaggtagt 480
cataggaaca aagacaggga aagctgcagc tttatgactt ggcttcaggg aatctgctgg 540
agacaatnna tgcccatgat ggagctttgt ggtccatgtc cctctctcca natcancgtg 600
gctttgttga caggtggtgc aaataaatct gtccaaattc tgggggattt tgantttagt 660

tgaaagatga aaaattnttc ccnaaaaaa aactttctgt ttaagccaan ccccaacttt 720
ggcacttaaa tnaaaaattt tctgt 745

<210> 2764

<211> 770

<212> DNA

<213> Homo sapiens

<400> 2764

ctancgattt cgcccgggac acccaattcc tgcacctgcg cagcgccagc ctcggttccc 60
agcagctctt gggcctgccc cgagaccagc gggagcancg tcagcggcac ctttggtgc 120
ctgggtggga ggctcagcat ccccggcaca ggggtcagct tgctggtgcc caatggagcc 180
attccccagg gcaagttcta cgagatgtat ctactcatca acaaggcaga aagtaccctc 240
ccgctttcag aagggaccca gacagtattg agcccctcgg tgacctgtgg acccacaggc 300
ctcctgctgt gccgcccgt catcctcacc atgcccact gtgccgaant cagtgcccg 360
gactggatct ttcagctcaa gaccaggcc caccagggcc actggganga ggtggtgacc 420
ctggatgang agaccctgaa cacaccctgc tactgccanc tggancccaa ggcctgtcac 480
atcctgctgg accagctggg cacctacgtg ttcacgggcg aatcctattc ccgctcagca 540
gtcaagcggc tccaagctgg ccgtcttccg cccccgncc tcttgccact cccttggat 600
tacaagcctc cggggttcta ctgcctggga agaacacgcc ttggttagcnc ttgaaaggaa 660
gtncctggga cttgggaacg gactctgggg cgggattact ttggttngga agnaacccca 720
aaaaccgnct tatttttcca agggaacagn ttttaccaca aaccttggcn 770

<210> 2765

<211> 578

<212> DNA

<213> Homo sapiens

<400> 2765

atgctcatac tgggttttgg ggtgcccatg atagtgtat atgtatattt cttttcttca 60
 tttttcaaag attatttcac ttggccatag aaagaaatac aaagaacaca attgttgga 120
 agtaataaca aagactggca aagcgcatg tgatttttaa agcaactttg acatgaattt 180
 atgtgtttta tctttccagg anccatatgg cacaaagggt attatttctc ttgttttgca 240
 gttgaacaag ggaaggtcag ctcatctccc caacatcaca cagctaatga gtaactgagc 300
 cagaacttga attcaggacc tctcacatcc agactctacc acatcaaatt ccctttcccc 360
 agtggctcta actttgactc tgttacatcc tanaacatca cctctttacc cgatatgaaa 420
 gacaaccttt tcacatagtt tagganttga ctttctctgt tcttaaagct gatctaactt 480
 gactanctgc cttgtattac atattttctc ccaaacaccc ctttctctan gacnaatcca 540
 aaatttggca atcttgggan ttagctatgt catantcc 578

<210> 2766

<211> 783

<212> DNA

<213> Homo sapiens

<400> 2766

gtttgctgcc ggagcggagt ctccggccgg cgtccagttt gagtctaggt tggagttgga 60
 accgtggaga tgcggaagga aacccccacc cccctagtgc ccccggcggn ccgggagtg 120
 aatcttcccc caaatgcgcc cgcctgcatg gaacggcant tggaggctgc gcggtaccgg 180
 tccgatgggg cgcttctcct cggggcctcc agcctgagtg ggcgctgctg ggccggctcc 240
 ctctggcttt ttaaggaccc ctgtgccgcc cccaacgaag gcttctgctc cgccggagtc 300
 caaacggaag ctggagtggc tgacctcact tgggttgggg agagaggtat tctagtggcc 360
 tccgattcng gtgctgttga attgtgggaa ctagatgaga atgagacact tattgtcagc 420
 aagttctgca agtatgagca tgatgacatt gtgtctacag tcagtgtctt ganctctggc 480
 acacnactg tcantggtag caaagacatc tgcataagg tttgggacct tgctcagcan 540
 gtggtactga attcataccg agctcatgct gctcaggta cttgtgttgc tgcctctcct 600
 cacaaggact ctgtttttct ttcttggcag cgaaggaaan atanaatttt actctgggga 660
 atacccccct tgttcccaag cccatcatcc acagaattgg gttggcaang gcgccctggg 720

ctaaccttcc ctaacctccc cttgggnttt gggcntcccc cncccaaant taaaattcct 780
ttg 783

<210> 2767

<211> 685

<212> DNA

<213> Homo sapiens

<400> 2767

acttagtatg cttacccgca gantggagga ctagctgtat gccagttcc aaaatgaagg 60
agatgagctc gttatttcca gaagactggg accaatttgt tctaaggcag ttggaatgtt 120
atcattcaga ananaaggcc tcaaatgtac tggaagaaat tgccaaggac aaagtttta 180
aagactttta tgttcataca gtaatgactt gttattttag tttatttgga atagacaata 240
tggtctctag tctgggtcat atattgagag tttacgggtg tgttttgcct tggctctgtt 300
ctttggactg gctcacagaa aagccagaac tgtttcaact agcactgaaa gcattcaggt 360
atactctgaa actaatgatt gataaagcaa gtttaggtcc aatagaagac ttagagaaac 420
tgattaagta ccttgaagaa tatgaacgtg actggtacat tggtttggtt tctgatgaaa 480
agtggaagga agcaatttta caagaaaagc catacttgtt ttctctgggg tatgattcta 540
atatgggaat ttacactggg agagtgccta nccttcaaga attattgatc caagtgggga 600
aagttaaatc ctgaanctgt tagaagtcag tgggccaatc tttcatggga attactttat 660
gccnncnagc atgatgaana acgtt 685

<210> 2768

<211> 817

<212> DNA

<213> Homo sapiens

<400> 2768

atgttggagc agcggaggcg gcgcagaggc gcgtcttggg tccccgcggc ggcgccggtg 60

ccaagcgctg gtttgcggat acccaggcag atctgcagtg cctaattgcca tgagtgtggt 120
 ggttcagcat gtggaggaaa aagctgtgca ctctgtgtcg cgcattctcca cggcagggaa 180
 gaaggccctg gaagangcac tgcttgtctt taacccaatg agccaggatc tcagtgccac 240
 agaggcccag ctgttgccct tcctgcaggg cctgcganat gatggcttcc aacctaccat 300
 cctgcgcagt ggtgatgtct atggctatag ttcatgcaca gctaattccc caagccagac 360
 gaaactgcaa gctcgtgccc ctaacccaac tgccacatca cctccagcca gtgctccccg 420
 aactgccatg cggttgcctg caggctgggc cacactgctt cccatgccgc tatctggcag 480
 actggccaaa gcatccacac cagcccttgc caagcatgct accaccaacc tgctgctgan 540
 ctctctgaaa caatcaagtg ccancatgc ccggggtgca acaatgggct tccccacca 600
 cttttatcca agtgtctacc ctgccatgcc ggctctctgt tgttcttgaa ggncttggtt 660
 ccacttaaaa atcccctgcc ctgcttgggt ncccaacaca aagggacaat cnetgcaact 720
 ctacttngc aaaatctcct ccnaaaactg cggaaaaatt cnaggggaaa ggttcccggg 780
 gaaacctccc ggcccaaact cccnaaaaa accccna 817

<210> 2769

<211> 533

<212> DNA

<213> Homo sapiens

<400> 2769

atittgagcc gctgccgcca ttggagtggg cccccccctt ttccccctcc gcctcctgac 60
 aggaaagggt taagggggac agagccctgg gaggccgggc cgggctcggg ggccaccccg 120
 ggggcccggg ccatggatgt gcgccgtctg aaggtgaacg aacttcgcga ggagctgcan 180
 cgccgcggcc tggacactcg aggcctcaag gccgagcttg ctgagcggct gcaggcggcg 240
 ttggaggccg aggagcctga cgacgagcgg gagctcgacg ccgacgacga accggggcga 300
 cccgggcaca tcaacgagga ggtcgagacc gaggggggct ccgagctgga ggggaccgcg 360
 canccaccgc cggccgggct gcagccgcac gcggagcccg gcggctactc ngggccggac 420
 ggacattatg ccatggacaa tattaccang canaaccaat tctacgatac ccaagtcac 480
 aaacaagaaa acgantctgg ctacgaaagg agaccactgg aaatgganca nca 533

<210> 2770

<211> 609

<212> DNA

<213> Homo sapiens

<400> 2770

```

aagacgcagt cttcagcaag ggaagtgctg ggaacgccct ggagtgaacc caggaagatg   60
cctgcagtgg gtgccagggc ccctctccac cgtccctgct gggcttcggg gccacgcccc 120
actgctgtga acggcctgcg gagcaccacg tgcgacggct ggaggcgaaa ggtctgcctt 180
tgatgtggct gttggtgcag ggcctgtggt gccttccgca gcggaaatgg cgcgccgccc 240
ggggagggcg ggagcagcgt cccgggtgcc cctgtgagga tgagcgacga gatgactgga 300
gggtccctga agacctcact aggggtgccc cagccgggtcc gctcccagga agcgacaccc 360
ccacagcccc agggctgcag ctgagggggt cgccactctg gctgggcgag gctgggccct 420
tgggggcagg cgccagaatg gcctcaggct ctacaagatg cctgaaaaca ccaacctctc 480
cagggtcac tagcattgga cgctttcacg ctctgccctg ggccggaagc cccctcacc 540
cgcgcgatgt gcaaactcct tgcanggtc actcantttc canaacttta attattgga 600
agttctccc                                     609
    
```

<210> 2771

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2771

```

ggagacaccg gaaggagccg cggctgctgc gggaagtggc cagttcagga ggccgacccc   60
ccgagggcag cgctgcgggg ccgttttccg gccctcctga cgcgacactg cccctctccg 120
agagctgaga aggaaaaanag gagcttgcgg aggtgcggct gcaggccgtt gttggtcgag 180
ctggcgggtc ccgcgggcca ggccgtggag agctcctgaa ggaagcacta aacatggaaa 240
    
```

ggaacaaccg gtaccagcca ctgcaaaaac atgccaaatt gtaaagacca tcgatgttag 300
gaanaaactg cctcaactaa tgagcaaaat aaccagctaa catcgtaatg acaggatcaa 360
attcacacat aacgatatta accttaaagg tgttacctca ttttgaaagt cttgggaaac 420
aggaaaaaat tcctaacaaa atgtcagctt ttcnaaatca ttgtccacat ttggattcag 480
ttggtgaaat aacaaaagaa gatttgatac naaaatccct tggacttgt caggattgta 540
aantccaagg accaaatctt tgggcatgtc tggaaaaata aatgttcata tnttggctgt 600
ggtgaatcnc aattnaaten ca 622

<210> 2772

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2772

gatttaactt attacttttt ctgcttctgt ttccacccca gctgcctctc ttgtcctgag 60
ggttaggctg gagtgacagt ttccgcccac ccccagccc aagaaagagg ctgccggaaa 120
gaaaatgctg accattggag gtgcccacaa gtagaatggg ctactgtgag gggtagttag 180
agccccattt ctggaggtat gcaaactctg actggacagc cagctctgag attttatcag 240
ggcacttcta tacctgtggg acattggact ggatgagccc tgagccagct tccactccta 300
cctgaataga aaactcactg caccnccca caacacntga taaacacatg tcctcactga 360
atgttactga ttgcggctga aggccctgcct ctggctgtgt ggggaagtgg gtggaaangt 420

<210> 2773

<211> 499

<212> DNA

<213> Homo sapiens

<400> 2773

aaaagaagca gcacctgttg agagaagtga cagttgagga aaataatgct tccccacatt 60

ttgagccaga tctccatatt gaggacctga ggaaatccct tggaacaaac cagaccaaag 120
 aggtgtcttc ttctctctcc cagagcaagg aggacttata cttggacagc ctgtcctccc 180
 acaatgtctg gcacctcttc tctgctgagg gggtagccct ccgtagtgcc aaggagtcc 240
 ttgtgcggca gacacgtcc atgcggaggc ggcagacagc tctgaaagct gcccagcagc 300
 attggcgcca tgagctggcc agtgcgcagg aggtggccaa agaccaccca ggcatcaagg 360
 ccctggaaga tatgcgcaag aacctggaga aggagaccag gcacctggat ganatgaant 420
 cngccatgcg gaaaggccac aacctgctga anaagaaaga ngagaagctg aatcagttgg 480
 agtcctctct ttgggaaga 499

<210> 2774

<211> 668

<212> DNA

<213> Homo sapiens

<400> 2774

gttaaatacat cggaatTTTT gatgatacct tttctatatg gattacaatt tgatcgctgg 60
 gaattctcca ccttaaagaa gtaccctcag gtgactacag atgtgttaac acccagcatg 120
 ttccggtagg agactttctg gatggggaag atttccagga attggcaaca agctcatttc 180
 actggtgggt ttgctgaagc attatcacia gacagtcaga atgactgatg agtgctcttc 240
 aggtgtgaat catggcaata cagtgaagaa cagtgattta ctgcttttga gggcgtgcat 300
 gtatatgatt aacggatgga agtgcaggac tccaagattt acttcttcc ctttccagca 360
 gaattacctg agacgagtaa aatctactgg cggagtcact ccattattct tatctgtgga 420
 gatctagatc ttgatttgaa agtttctgag aaaatcttca gctcagactt gagggccaac 480
 tttaccagct gaaggatctg catttactgc tcaaccacat ctaatttgat gtcctctgca 540
 gatttaaaat gtgtgccttc ttttccgtca ccaagtcac cctgggttnc tactggaaca 600
 tccttctcaa tccccccga cccatggatg gctgttctcc attgtctgtt tcnccanatg 660
 tcctccnn 668

<210> 2775

<211> 810

<212> DNA

<213> Homo sapiens

<400> 2775

```

gaaggaagcg gtggctgctg cggatgtcgg tgtgagcgag cggcgcctga acacacggcg   60
gctgccgagc gcctgaccgg ggccctgcgc agagcctgca ccgagctccg gggccccaca  120
cccgtacagg tggccctgcg cccgttgcta ctgaggcggc gtgctctgca ttcttcgctg  180
tccaggcctg ccggctctgg tgtctgctgg ctctctcttg ctgcctgct cctctctgct  240
tgcctgagtc atcgccgccg ccgccgccac agccatggcc ganagtggg aaagcggcgg  300
tcctccgggc tcccaggata gcgccgccgg agccgaaggt gctggcgccc ccgcggccgc  360
tgcctccgcg gancccaaaa tcatgaaagt caccgtgaag accccgaagg aaaaggagga  420
attgccgtg cccgaaaata gctccgtcca gcagttaag gaagaaatct ctaaacgttt  480
taaatacat actgaccaac ttgtgttgat atttgctgga aaaattttga aagatcaaga  540
taccttgagt cagcatggaa ttcatgatgg acttactgtt caccttgtca ttaaacaca  600
aaacaggcct caggatcatt canctcanca aacaaataca gctggaaaca atgttactta  660
cntcatecaa ctctaatat taactctaca tctggttcct gctactaaca accctttttg  720
gtttaagttg gccttggggg gactttgcaa ggtctnaatt ancttggggg ttgaaatact  780
aaccaanctt tctctnaaat taacnaaatt                                     810

```

<210> 2776

<211> 813

<212> DNA

<213> Homo sapiens

<400> 2776

```

ggtttttagaa agtagcatta gtattgcagc tagccacaat aatttagttg aaatttaaatt   60
cacaatatatt agcccctcta aaaatgcaat acttacatcc ctatatataa ctacatatct  120
atattctctc tatatagtat cctgtatgtt atttatccac tatacatctc tatatagcta  180

```


atatgctata tattactata tacagtgata atataaatat acacacattt tatgcattat 240
 atatataact atacggtaat actatatgta tgtaatatat agtaataagt gtgccataaa 300
 gtgtcaccta ccttggcttc caatatcaga gacttctact ccagtgtcca tttttatacc 360
 atcaagaatg atagcttgat caccaccgcc ttcacatctt tccttctcag agtcttcaag 420
 atcaccccag gagttttcta ctccctctcc aatttgggca gttccaggag tccatagcac 480
 aggtgtagaa acacttaaca agttaagaaa actgagtaac aaaaatattg ctatttgatg 540
 aactgttgaa gatgagaatg aaagttttct tcttgaaga ttgattcaag tgtgccccaa 600
 gttcctangg gaaaaaaaaac ttaatatanc tacactntgg atgggtggaa cnatggaaga 660
 agaaaaaaaaa ctcnnggcag attttatggg atgccattaa taagaaatgt tgaaaaaaaaa 720
 agaatccctc aacattttta anttattagt tactaaaatt taaatttggg gccctaaaaa 780
 tcctggtttt tttccccgga aaaacttgga ann 813

<210> 2777

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2777

gcatttgccg ccggcgccag ggtggagagt tgtgcgccg tccctgggcc tgagctccg 60
 ctccggctgg ggcgccctgc atgtctcaag atggcgagc tgggcgaatt aaagcacatg 120
 gtgatgagtt tccgggtgtc tgagctccag gtgcttcttg gctttgctgg ccggaacaag 180
 agtggacgga agcacgagc cctggccaag gctctgcacc tcctgaagtc cagctgtgcc 240
 cctagtgtcc agatgaagat caaagagctt taccgacgac actttccccg gaagaccctg 300
 gggccctctg atctctccct tctctctttg cccctggca cctctcctgt aggctcccct 360
 ggtcctctan ctccattcc cccaacgtg ttggcccctg ggcaccctgc tgggccccaa 420
 gcgtgaggtg gacatgcacc cccctctgcc ccancctgt caccctgatn tcnccatgaa 480
 accattgccc ttctatgaan tctatgggga n 511

<210> 2778

<211> 577

<212> DNA

<213> Homo sapiens

<400> 2778

```

aagcgcgttc ccggcagctg cgggctccga ggccaganag aaaagactgc gaggtggccg   60
cagctgtggc cggagagcac aaagaatgaa ccagcagtgg aagagaaaat actgtaagct  120
ggctgactgc tggatgaanaa aatgcctttat ttttgtggca ggcatctgtg ggatctgtaa  180
tagaaatgat ggctggctgt ggtgaaattg atcattcaat aaacatgctt cctacaaaca  240
ggaaagcgaa cgagtcctgt tctaatactg caccttcttt aaccgtccct gaatgtgcca  300
tttgtctgca aacatgtgtt catccagtca gtctgccctg taagcacgtt ttctgctatc  360
tatgtgtaaa aggagcttca tggcttggaa agcgggtgtgc tctttgtcga caagaaattc  420
ccgaggattt ccttgacaag ccaaccttgt tgtcnccaga agaactcaag gcagcaagta  480
gaggaaatgg tgaatatgca tggatattatg aaangaagaa atgggtgggtg gcagtagcat  540
gagcgcacta ntananaact gggaanatgc tttttcc                               577

```

<210> 2779

<211> 400

<212> DNA

<213> Homo sapiens

<400> 2779

```

atttacacaa gtattgttga gggagtgatt tttcttgat atgcgtctgt tttcatttat   60
tattaatttg aaagatnaac agttgtgata cataatggat catttcttat gtcttttaca  120
tagctaataa tgttctctgt ttatttctca tgaattccca ttttgtggct aaagaccaga  180
cctttgcact attcatcaa gattatttta ttgaggtttg gcttacatat agtagaggca  240
atacatatga gatacgcaac tttgtttttg cagctacaat gcactttctc gatctcatat  300
gtttttgtct tgtatagacn gacacaagtt cancatgttg canattggga atagttagct  360
atacaaaaga gattttgagc ctagatgagc ttaggataga                               400

```

<210> 2780

<211> 823

<212> DNA

<213> Homo sapiens

<400> 2780

```

aaaaaaaaa taaaagatgt atatcaacaa anccaatata tggaatagtg ccttagatgc 60
attcagaaat cgaaacttta atccttcata tgcaattgaa gtagcatatg ttattgaaaa 120
tgataatfff ggaagtgagc atcctggatc aaagcaagaa tttctgagtc tcttaatgca 180
acatcttgag aactcatcat tgtttgaagg gtccttgta aagaacttgt ctctaaattc 240
tcaagctctg aaaganaatc ttactatga agctggcaaa atgcttgcca tttctttagt 300
tcacggtggt ccttcacctg gtttcttttc taaaaccttg ttttaactgcc ttgtttatgg 360
accagaaaat acccagccaa ttttagatga tgtttcagac tttgatgtgg cacagattat 420
aatcaggata aatactgcaa caactgtagc tgacttaaag tcaataataa atgaatgcta 480
taactacctt gagttaattg gatgtctcag acttataacg acattaagtg ataaatatat 540
gtagtaaaaa gacatacttg gctaccatgt tnattcagan agtccacaca ccctttgaaa 600
gttttaagca nggtctgaaa acccttggtg ttttgagaaa aattcaggct tatccanaaa 660
cattttgtag catcctgtgt cataaanctg aaantctttc tgccaaaatc cttagtgagc 720
ttttttacag tacacacatt acctgatgtt aaaactttgg gggtttggaa canttacttt 780
cnggctgttg aaaaatggtn aatctncnc aacaatggga aaa 823

```

<210> 2781

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2781

```

ggcaaatggg cttgggcggc tctcggcgg gtggcggtag tggccgtaac gggtcctcct 60

```

ggccctgtta atgtcggggc caggccgggg gaggatggcg ccctagaacc cggccttgct 120
 ggggtagggg cgggagggga cggggtgggg accggccatg tcggaggtga cccggagtct 180
 gctgcagcgc tggggcgcca gttttaggag aggcgcccac ttcgactctt ggggccagct 240
 ggtggaggcg atagacgagt atcagatatt agcaagacat ctacaaaagg aggcccaagc 300
 tcaacacaaat aattctgaat tcacagaaga acaaaagaaa accataggca aaattgcaac 360
 atgcttggaa ttgcgaaatg cagctttaca gtccacacag tctcaagaag aatttaaact 420
 ggaagacctg aagaagctag aaccaatcct aaagaatatt cttacatata ataaagaatt 480
 cccatttgat gttcagcctg tcccattaag aagaattttg gcacctggtg aagaagagaa 540
 tttgggattt gaagaagatg aagaagaagg tggctgctga gcagggtctc ctgattcttt 600
 tctgctaaa ttccccgtac ttattacca angttncat ccgaaaccan 650

<210> 2782

<211> 627

<212> DNA

<213> Homo sapiens

<400> 2782

ccagtctggg caccggagcc tgtgaccgct tcgttagtgg agaggtagct ggcagtccgc 60
 ttcggcgggc ctgtgccccg cgccgttctc ggggcctccc tgctgagctc gcggctcacg 120
 ctgagaggga cacgcagtga cgagcggccg aagcagcttt gcggtgagag cacgctgggc 180
 cgggggccgg gcgggancct ggtggcgggt aacgccggac tcgagggttt tgtagtgcac 240
 ccctgagcat gagcacagaa tgaagcggcg tttggatgac cagnagtcac cggtgtatgc 300
 agcccagcag cgtcggatcc ctggcagcac agaggctttt cctcaccagc accgggtgct 360
 tgcccctgcc cctcctgtgt atgaagcagt gtctgagacc atgcagtcag ctacgggaat 420
 tcagtactct gtaacacca gctaccaggt ttcagccatg ccacataaac tccggcagtc 480
 atgggccccg tatatcagca nttcatatca gccatcatca cccaacagcg gtgcagcccc 540
 acggangcca ngtggtccag aatcatgctc atccagcccc accagttgca ccagtgcang 600
 gacagcancc aatttcanaa gctgaaa 627

<210> 2783

<211> 648

<212> DNA

<213> Homo sapiens

<400> 2783

```
acggcacctg gaaatggaaa gccagtgaag gctgctttgg gccggggcag cgggtgggac 60
cgggcgggag ggattccaaa gagaccgccg ggaaggctag agcttggaat tccggctcct 120
cggagtcctg gccctcccc accgccgcct cggagctcag cacaccttgg atgggggang 180
cgggcagctc ctanccccgc accccaggag gcgcgctcgg agggaagccg ccaccgcgcc 240
gcctctgcct cggcgcggaa caaacggtta aagattttgg gcaccgcctc gcggggggag 300
gagccagggg cccaatccgc aattaaagat naactttggg tgaactaatt gtctgaccaa 360
gcggaggaag ttcctgcaga tgaancgan gaaatacggc ttcatttaca agacgcatct 420
gttcgggcgg ccacccgtac gggatgatggg cgcggacaat gtncggcgca tcttgctcgg 480
anancaccgg ctggtgtcng tccactggcc ancgtcgggt cgcaccattc tgggatctgg 540
ctgcctctct aaccttgcac gactcctcgc acaagcaang gcaanaangt gattattcgg 600
gccttcancc gccaaaggcac tccaaatgct acgttcccgg tnatcacc 648
```

<210> 2784

<211> 462

<212> DNA

<213> Homo sapiens

<400> 2784

```
gcatgtgcgt gtgtgctggc tgccgggctg ccccgagccg gcggggggagc cgggtccgctc 60
caggtggcgg gcggctggag cgaggtgagg ctgcgggtgg ccagggcacg ggcgcgggtc 120
ccgcggtgcg ggctggctgc aggctgcctt ctgggcacgg cgcgcccccg cccggcttcc 180
cgggacgcgg ggactgggag caggctgcaa gctgggtggg ttggggagga acgagagccc 240
ggcagccgac tgtgccgagg gaccggggga cacctccttc gcccggccgg caccgggtca 300
```

gcacgtcccc ccttccctcc cgcagggagc ggacntggac tacgactcgt accatcacta 360
 tttcnacgac tatgactgcg gggaggattt ctaccgctcc acggcgccca ncgaggacat 420
 ctggaacaaa ttcgagctgg tncatcgcc cccacgtct cc 462

<210> 2785

<211> 713

<212> DNA

<213> Homo sapiens

<400> 2785

ctcttttagc ggcggcggct tcttccgtgg gacaatatgt tcaagagaat ggccgaattt 60
 gggcctgact ccggcgggag agtaaagggt gttactatcg ttaaaccaat agtttacggt 120
 aatgttgctc ggtattttgg aaagaaaaga gaagaagatg ggcacactca tcagtggaca 180
 gtatatgtga aaccatatag aaatgaggat atgtcagcat atgtgaagaa aatccagttt 240
 aaattacatg aaagctatgg caatccttta agagttgtta ctaaacctcc atatgaaatt 300
 actgaaacag gatggggtga attcgaaata atcatcaaaa tatttttcat tgaccctaatt 360
 gaaagacctg taacctgta tcatttgcta aagctgtttc aatcagacac caatgcaatg 420
 ctggggaaaa agacagtggg ttcagagttc tatgatgaaa tgatatttca agaccaaca 480
 gcaatgatgc aacaattatt gacaacatct cgtcagctaa cattaggagc ctataagcat 540
 gaaacagaat ttgcagagct tgaaagtga aaccagagaa aaattanaag ctgctaanaa 600
 aaaaacaagc tttganattg cagaacttaa ggganagatt aaaaaccaan ttcgtgaaac 660
 tataaattgt ttaaaaaatg aaatcagaaa acttgggaana agatgaccna gcc 713

<210> 2786

<211> 576

<212> DNA

<213> Homo sapiens

<400> 2786

ggtgcttcta ggaagtagaa cgccggctcg catgcctgcc cgcccgccag cctgccgggt 60
 acggcctttt ccgccggggc ttccagggtca aagaattcgc ctttgccgct accgctttct 120
 taccctccgc acccgttaag ttctccggtc gggcggcagt ctctgaacac ttagccgcgc 180
 catccgggggt cacaccgcct ggaaggangt gacgggggcg gcgcggggcg cggacactcc 240
 ccgctgagag tccgcctgcc atggactcgg aatattacag cggcgaccag tcagatgatg 300
 gtggtgctac cccagtacag gatgaacggg attcagggtc agacggtgag gatgatgtnn 360
 atgagcaaca ctccgatca gacactggaa gtgtanaacg tcattcagag aatgaaacta 420
 gtgatcgaag agatggcctc cccaaaggac atcatgtnac agactctgag aacgatgagc 480
 ccttaaactt taatgctagt gactctgaaa gtgagganct tcacaggcaa aaggacancg 540
 actctgaatc tgaagaacnt gcanaacctc ctgcna 576

<210> 2787

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2787

gctccggcgg cttcgtgct agctcgcggc gacgtcgggc cgattttccc aggatgacag 60
 agctgaggca gagggtggcc catgagccgg ttgcgccacc cgaggacaag gagtcagagt 120
 cagaagcaaa ggtagatgga gagactgcat cggacagtga gagccgggca gaatccgcac 180
 ccctgccagt ctctgcagat gataccccgg aggtcctcaa tagggccctt tccaacttgt 240
 cttcaagatg gaanaactgg tgggtgagag gcatcctgac ttigggccatg attgcatttt 300
 tcttcatcat catttacctg ggaccaatgg ttttgatgat aatcgtgatg tgcgttcana 360
 ttaagtgttt ccatgaaata atcnctattg gctacaacgt ctaccactca tntgatctgc 420
 cctggttcag gacgtcanc tggtaatttc tcctgtgtgt aaactatttc ttctatggtg 480
 agacagtgac ggattacttc ttncacctgg tccaaaaaaa aaacctttgc ggattctcan 540
 tnaataccac cggttcattt cctttactct ctatctaata ngattctgcn t 591

<210> 2788

<211> 764

<212> DNA

<213> Homo sapiens

<400> 2788

```
tcaacatcaa ttattcaggc ccctacagtt gtggtattga ggcccctaaa ggcttctgcc 60
tttcaccaat tagtgctgcc agttactgag gcttctccca aaaggtatca gtccagtctt 120
aaagatattt cattgtgaaa gaagaaacta aactatcagg cctctttttac aaaatgagag 180
attgaattta agcttgtcaa gcacgtactg gaaggtatga attacactac catgtgtttt 240
gtatcttccc tttcaagtga tgatgttaaa tgaaggtaag tttttcatcc ttttttaatt 300
tttgtttttt ataaatcatt tcagcttttt ctggtttata gaggtgtctt atttctaag 360
caacagaccc ccaactttaa cagatttgat atggatgcat ttattcaca gcaaccccaa 420
aagtccaaaa atgtaataat ttgacaagg cccaaagttg anatgctatg aagcttgtgt 480
gtgtgaaaag tcagttatga ttgtctggaa aaaactgtgg tgtgtatgct gtaaanttcc 540
acatttcaca tgcagtgtac tccaaaaagc gggtttgggt caccatttcc catctctttt 600
taaaaaatga ctgctgttgg gggccagggg acatcatggg gaagtggggc tgtccaattt 660
agctttgccc ctgcaccttc ngcccangaa aagatttgaa ccnaaaccaa ngcttccaaa 720
aaaggcaaaa tnttttccgg caaaaaaggg acccaggtta cccc 764
```

<210> 2789

<211> 721

<212> DNA

<213> Homo sapiens

<400> 2789

```
gtgcgccccg cccctctggg gcggagagac tcagcccctg cccctcagcg gataacctgg 60
ggactgaccg ttccctgggg atccgacggg ccccagagga cccacgcctg agccccgtgc 120
gactcgtggc ctttgggcta gaagccatgg acgccttcac ccgcttcacc aaccagaccc 180
agggccggga ccgactcttc agagccactc agtacacatg catgttgctt agatatttgt 240
```


tagagcccaa agctggcaaa gagaaggtag taatgaagct caagaaactg gaggccagtg 300
 tgagcactgg tcgtaaatgg ttcagactag gcaatgtggt acatgctata caggcaactg 360
 agcagagcat tcatgccact gacctggtac ctcgcttatg cttaacatta gccaacctga 420
 accgtgtgat ttatttcac tgtgacacca tctctgggt gaggagcgta ggtctcacct 480
 ctggcatcaa caaagagaaa tggcgaacga aggctgctca ccactactac tattctcttc 540
 tgctgagcct ggtagggat ctgtatgaaa tctccctgca gatgaaacga tttcatgtga 600
 cagggcaaag aaagagaatc agcatcccag atccttgctt acntggtag agaacaaatg 660
 gtccatcttc tctcttttcc attctaacac tctcctgtct gacctgaaa cttgtnattc 720
 t 721

<210> 2790

<211> 619

<212> DNA

<213> Homo sapiens

<400> 2790

atTTTTTca agggatgagc tttgccagct ccacgtggaa gtccctaaag ctctccttc 60
 cacttcgaag cgtgactgat gcctccagg cctcacagcc gcttctgaag cacttcctga 120
 aagccagctc caccctggcg aggcctgac ctgagcgac ccaagcccag gacgatgcct 180
 gttgcgttct tctccccag tagcaagtca cctccccag cagcctccat gttgtctggg 240
 ctctccctgt ggggatgcc aggggagagt gagagagcag aggtggccaa gatggcatgt 300
 gctgccttct ctctggaac atgctgcttc cacaggcgag tgccagtgtc tccgtgtgaa 360
 ttcattgatt gtggcctgag tgaattcctg ggtttgctgt tccagatgat tctgcagggc 420
 ttcaaaacca gcaaggccct gagcaaagct gctccttctt ctcatgggct gaactcatcg 480
 tgatgtcact ggctaagggg ggcanatgg ggtccagccc ggcccangca catggaactg 540
 cggctctgtc angctgaatg tgggtgttgc cttctaagat nggccccaaag gcaccanttc 600
 ccaaaaaagg tctgtcncc 619

<210> 2791

<211> 551

<212> DNA

<213> Homo sapiens

<400> 2791

```

tttgatgatg cccaacagga ggaccggaag agactggcgg agctgctggt ctccgtcctg   60
gaacaggggt tgccaccctc ccaccgtgtc atctggctgc agagtgtccg aatcctgtcc  120
cgggaccgca actgcctgga cccgttcacc agccgccaga gcctgcaggc actagcctgc  180
tatgctgaca tctctgtctc tgaggggtcc gtcccagagt ccgcagacat ggatgttgta  240
ctggagtccc tcaagtgcct gtgcaacctc gtgctcagca gccctgtggc acagatgctg  300
gcagcagagg cccgcctagt ggtgaagctc acagagcgtg tggggctgta ccgtgagagg  360
agcttcccc acgatgtcca gttctttgac ttgcggctcc tcttcctgct aacggcactc  420
cgcaccgatg tgcgccagca gctgtttcag gancagaan gaatgcgcct gctaactgac  480
aactgganc tgacctgggg gtgactcctg aanggaaccc ccaccacgt ccttccttcc  540
caanaaactg a

```

<210> 2792

<211> 697

<212> DNA

<213> Homo sapiens

<400> 2792

```

atcgctgcgg ttgcgagcgc tgtaaggagc ctgtgctgtg ccgcgcagtt aggcagcagc   60
agccgcggga gcagtagccg ccgtgggagg gagccatgaa gcattacgag gtggagattc  120
tggacgcaaa gacaaggagg aagctgtgtt tcttgacaa ggtggagccc cacgccacca  180
ttgcggagat caagaacctc ttcactaaga cccatccgca gtggtacccc gcccgccagt  240
ccctccgcct ggacccaag ggcaagtccc tgaaggatga ggatgttctg cagaagctgc  300
ccgtgggcac cacggccaca ctgtacttcc gggacctggg ggcccagatc agctgggtga  360
cggctcttct aacagagtac gcggggcccc tttcatcta cctgctcttc tacttccgag  420

```

tgcccttcat ctatggccgc aaatatgact ttacgtccag tcggcataca gtggtgcacc 480
 tcgectgcat ctgtcactca ttccactaca tcaagcgcct gctggagacg ctcttcgtgc 540
 accgcttctc ccatggcact atgcctttgc gcaacatctt caagaactgc acctactact 600
 ggggcttccc cgcgtggatg gcctattaca tcaatcacct ctctacactc cccctancta 660
 cggaactcaa cangttaaac tggcctcccn tctttgt 697

<210> 2793

<211> 747

<212> DNA

<213> Homo sapiens

<400> 2793

gtgtgtgtat gtgtgtgtaa atttatatac acacacatgg aaacagttcc tggaanagaa 60
 ttctgaatgc ttgtctagca aaacactgtg gtgtgcaaac ctagaacca atagaaaaaa 120
 aagccattta tctgaaggct gcatagtggg gagagtcttc agtttacctc attctttgta 180
 gcancccttg attttaacag gtttttgtaa taggtacaga taatcccata cttttctagg 240
 tgcgatttta agttaagcta aaaattattt gtagggttaa tttatttgta tatgatagta 300
 gaaggtaaga tcatgtcaaa cttataatt tggggaatct gacactattt aaattattgg 360
 caactgttgt ctgtgtgaca naaattcttt ttctactggc tcagtctgtt acattaataa 420
 tgcattttat atgttcaggc acactttaca taaatacaaa gttegttagt aaatatctgg 480
 ctattttggc tatttacaac actaatttca ttatttttat ctgtaagcat tattaataca 540
 tctttaccaaa aacctgagca atacnatatt tncctttatat gttatatgcc cttgtttgct 600
 aaaancta atttttgcat ttactttaaa ggggctgttc taaaccccca gctttaattc 660
 ctcccctaaa aaaaaacatt gcagetaacc ctngaacncc cngttttaaa atacantatt 720
 tctcttcccc aatctcentg cctccgc 747

<210> 2794

<211> 645

<212> DNA

<213> Homo sapiens

<400> 2794

```
gcggtgccgg gggcggggcg cggcggctgt canctgactg tggcggcggc ggcctcgang 60
tgacaactgt ctccgtcgca ngctccggcg ggggcgcaag angtcgcccg gcgcgtcact 120
gtcgggtcgg cgagccacgg gggccgcccgc agcaccatgg cgaccaccgt cagctggacg 180
cccaggcggc ccagcagctg cagtacggan gcgcantggg caccgtgggc cgactgaaca 240
tcacggtggt acaggcaaag ttggccaana attacggcat gacccgcatg gaccctact 300
gccgactgcg cctgggctac gcggtgtacg aaacgcccac ggcacacaat ggcgccaana 360
atccccgctg gaataaggtc atccactgca cggtgcccc aggcgtggac tctttctatc 420
tcgagatctt cnatgaaana accttctcca tggacgaccg cattgcctgg acccacatca 480
ccatcccgga ntcctgaagc agggcaaggt ggaagacaaa tggtagacct gancgggaag 540
gcaggggggac aacaaggaag gcatgatcaa cctcgtcatt tctacncgct gttccanct 600
gccatggtna tgccaccan cccgtggtcc tgatgccaac aatnt 645
```

<210> 2795

<211> 760

<212> DNA

<213> Homo sapiens

<400> 2795

```
naaggaactt taaattctta tatttacttt tctctcagta aattgttaaa ttttactca 60
gcaaaagatt ggcatttggt aagtgttcta tatttagtac taaaatcaca gtcatgaaat 120
catagtcata aaatggtctt cacacagcag tcatccgtgt catttatcat ttgtaatat 180
taaattatgg caattttatt tcaaactaaa gtttgaacac cggaaagtca ttactcagt 240
atttghtaatt tgggacttgg attattttatc tagagatggt tgtatatatt gtcagtaact 300
aatactgcgc tgccatcatg gtgactgtca tggttctaca gaaatgccct ccatgtgtcc 360
ctctaagtgt gcatgtttca gtgggttgga agttttgtat atttattgta ttaacacaga 420
gtgtcataaa ataaaatgct gtttactgga tgtttgtttg tataattttg aacactataa 480
```

tagcaattca gagacagaca ttgttaaagg tttgatgtat atanaaatc catgtttgat 540
 tttttaaaat atgtgtataa gtctgtcatg tgctaaacaa aataatatga aagacctagt 600
 taaaaattct aaccaatgtt aaaatgacca ttttncgtgt gcattaaaac ctttacaggt 660
 taatggaaca tgaacttcnc cccatattaa atattttggg cccitttaagg tcnaaataca 720
 natctcctaa aanttanatt ccaaatggaa aaacctattc 760

<210> 2796

<211> 577

<212> DNA

<213> Homo sapiens

<400> 2796

tgggggtcac gtccaggatga tggacccgga gcccgteccc ccaatccctc accccccaca 60
 cctcagccac tggagactga tgatccaacc acaggatccc tactctttgg ccacgagatc 120
 ccagtaccca gatcctggat cctagactcc tatgccccaa ccattgggtc atgggatccc 180
 agcaccacaga tcctggatcc tagactccta tgccccaaacc actgggtcat gcgatcccca 240
 cccttcagcc actagatccc agatccccct gtaaccataa ctgtggatcc cttacttcag 300
 caactcaagt ctgctaccct aaccacaaga ttcaagatta tccacacccc agcccttaat 360
 ccccatcccc caaatcactg gatcctgcag ccccatatcc taaggatggat cccacgcttc 420
 cctgtgcccc ctactggatc ctggacctct acgtcttaac cactggatcc cacacaaatc 480
 antgaatgga tcccaacacc ccaaccacag gagcacggat tccctgtnc tcaacaccca 540
 naccctgcct ccctcangca ccanatccag tgcctta 577

<210> 2797

<211> 737

<212> DNA

<213> Homo sapiens

<400> 2797

naatggcatt gaaacgaatg ggaattgtaa gcgactatga gaaaatccgt acctttgccg 60
 tagcaatagt aggtgttggt ggagtaggta gtgtgactgc tgaaatgctg acaagatgtg 120
 gcattggtaa gttgctactc tttgattatg acaaggtgga actagccaat atgaatagac 180
 ttttcttcca acctcatcaa gcaggattaa gtaaagttca agcagcagaa catactctga 240
 ggaacattaa tcctgatgtt ctttttgaag tacacaacta taatataacc acagtggaaa 300
 actttcaaca tttcatggat agaataagta atgggtgggtt agaagaagga aaacctgttg 360
 atctagtctt tagctgtgtg gacaattttg aagctcgaat gacaataaat acagcttgta 420
 atgaacttgg acaaacatgg atggaatctg gggtcagtga aaatgcagtt tcagggcata 480
 tacagcttat aattcctgga gaatctgctt gttttgcgtg tgctccacca cttgtattgc 540
 tgcaaatatt gatgaaaaga cctgaaacga naaggtgttt gtgcagccag tcttcttacc 600
 actatgggtg tggttgctgg gatcttaata caaaacgtgt taaagtttct gttaaatttt 660
 ggtactgtta ntttttacct tggataccat nccatgccgg aattttttcc cactatntcc 720
 atnaaaccca atccncc 737

<210> 2798

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2798

aagatcattc ttttacttgt ctatggctgc ttttctgtgg cagagtagct gccacagaaa 60
 ctatagccca caaagcctga tatctactgt ctgtctgttt atggaaaaaa tttatcaacc 120
 catggctctat agtatagtgt gatatgacta ctgttccaat gtattgaagt gttgggatag 180
 ttttttcaaa tgttttcaga tgttcttgtt ttagaatcat tgtcaccttt aagaggaaaa 240
 aggtcatcac tagataatct aaacagattg ttgcttctca gtgttagcaa ggaaaataat 300
 ctagtttcaa attacattgc agtataatga aaaagatcca tatactgtgg aatgatattc 360
 ttttaaaatt atttgctatg gcttggtaaa aatgtacttt ttccagtagc acatatcaca 420
 agaacctcac tgtanttgaa agccatctnt ctntagtatt tgtttatccn tttaggagag 480
 tcnagcaaag gt 492

<210> 2799

<211> 816

<212> DNA

<213> Homo sapiens

<400> 2799

```

cagccacct cttgcatcgt cacctacagg tatctaagca atggatccaa gccctggagg 60
ttggtgagag ccatgtatta cccctagatg aaattggaca agagaccatg accgtaaccc 120
tcctcgatgc caatcactgt cctggttctg tcatgtttct ctttgaagga tattttggaa 180
ccatcctcta cacaggatgat ttctgataca caccatccat gctaaaggag ccagccctga 240
cactggggaa acagatccat actttatacc tagacaacac caattgcaat ccagccctgg 300
ttcttccttc ccgacaagaa gctgccacc agattgtcca gtcattcga aaacacccac 360
aacataacat aaagattgga ctctacagcc tgggaaagga atcactgctg gagcagctgg 420
ccctggagtt tcagacctgg gtggtattga gtcctcggcg cctggagttg gtacagctac 480
tgggcctggc agatgtgttc acagtggang agaagctggc cgcattccatg cagtanacca 540
tatggagacc tgccattcca acatgctgcg ttggaaccan acccacccta cgattgctat 600
ccttcccaca aagccgaaaa atccacagct cccaccctga tatccacgtc atcccttact 660
ctgaacattc ctcttactcc gaacttcctg cctttgtccc aacactgaaa ccttgccaag 720
ttggttgccc attgttaatt ccgccgncc ctgttgaaa ggtttccang ganagtctcg 780
aaacccang gattctceng tgccccctga aattcc 816

```

<210> 2800

<211> 616

<212> DNA

<213> Homo sapiens

<400> 2800

```

gagatcagaa caatggccta gggtcaggcc cagccccagg cccagtggta ttactgaatt 60

```

cactgaatgt ggatgcagta tgtgagaagc tgaacaaat agaagggtg gaccagagta 120
 tgctgcctca gtattgtacc acgatcaaaa aggcaacat aaatggccgt gtgttagctc 180
 agtgtaacat tgatgagctg aagaaagaga tgaatatgaa ttttgagac tggcaccttt 240
 tcagaagcac agtactagaa atgagaaacg cagaaagcca cgtgggtccct gaagaccac 300
 gtttcctcag tgagagcagc agtggcccag ccccgcacgg tgagcctgct cgccgcgctt 360
 cccacaacga gctgcctcac accgagctct ccagccagac gccctacaca ctcaacttca 420
 gcttcgaaga nctgaacacg cttggcctgg atgaangtgc ccctcgtcac agtaatctaa 480
 gttggcagtc acaaactcgc agaaccctaa gtctttcgag tctcaattcc caggattcca 540
 gtattgaaat ttcaaanctt actgataagg tgcaggccga gtatananat gcctatanag 600
 aatacattgc tccnat 616

<210> 2801

<211> 620

<212> DNA

<213> Homo sapiens

<400> 2801

ctcggttcct ctttcctcgc tcaagatggc gctgctcgcg atgcattctt ggcgctgggc 60
 ggccgcggcg gctgcttcg aaaagcgccg gcactccgcg attctgatcc ggcctttagt 120
 ctctgttagc ggctcaggtc cgcagtggag gccacatcaa ctcggcgcct tgggaaccgc 180
 tcgagcctac cagcagattc cagantcatt aaaaagtatc acatggcaga aattgggaaa 240
 aggcaattca ggacagttct tagatgctgc aaaggctctc caggtatggc cactgataga 300
 aaanaagaca tgttggcatg gtcatgcagg aggaggactc cacacagacc caaagaagg 360
 gttaaaagat gttgatactc ggaaaatcat aaaagcaatg ctttcttatg tgtggcccaa 420
 agacaggcca gatctacgan ctaganttgc catttcgctg ggatttttgg gtggtgcaaa 480
 ngccatgaat attgtggttc cttcatgtt taaatatgct gtanacagcc tcaaccanat 540
 gtcnggaaac atgctgaacc tgagtgatgc cccaatata ttgcaaccat ggcaacanca 600
 nttctgattg gctatggtgt 620

<210> 2802

<211> 604

<212> DNA

<213> Homo sapiens

<400> 2802

```

aagatggcgg accttgattc gcctccgaag ctgtcagggg tgcagcagcc gtctgagggg   60
gtgggaggtg gccgctgctc cgaaatctcc gctgagctca ttcgctccct gacagagctg  120
caggagctgg aggctgtata cgaacggctc tgcggcgagg agaaagtggg ggagagagag  180
ctggatgctc ttttgaaca gcaaacacc attgaaagta agatggtcac tctccaccga  240
atgggtccta atctgcagct gattgaggga gatgcaaagc agctggctgg aatgatcacc  300
tttacctgca acctggctga naatgtgtcc agcaaagttc gtcagcttga cctggccaag  360
aaccgcctct atcangccat tcagagagct gatgacatct tggacctgaa nttctgcatg  420
gatggagttc agactgcttt gangaatgaa gattatgagc aggctgcanc acatattcat  480
ccgctacttg tgcctggaca agtcggtcat tgaactcagc cgacagggcc aaggggggan  540
catgattgat gccnacctga aattgctgcn ggaagctgan caacgtctca aanccattgt  600
ggca                                                                    604

```

<210> 2803

<211> 653

<212> DNA

<213> Homo sapiens

<400> 2803

```

ctccgagcag gacactgcta cttaacaagg tggtttgagc caaactgtgg cacgtttcag   60
gcaggattcc tccttcattc aaactgcac acccaggant ctgcaaattc cccaaagtag  120
gaggaaaaat gaccacattc aaggaggcag tgaccttcaa ggatgtggct gtggtcttca  180
ctgagganga gctggggctg ctggaccctg cccagaggaa gctgtaccga gatgtgatgc  240
tggagaactt caggaaacctg ctctcagtgg ggcatcaacc gttccaccaa gatacttgcc  300

```

acttcctaag ggaagaaaag ttttggatga tggggacagc aacccaaaga gaagggaatt 360
 caggaggcaa gatccaaact gagttggagt ctgttccaga agcaggagca catgaagagt 420
 ggtcctgcca gcaaactctgg gaacaaattg caaaagactt aaccaggctt caggactcta 480
 tcataaataa ctctcanttc tttgaaaatg gtgatgtccc ctcccagggt gaagcaggac 540
 taccacaat tcatacaggg acanaaacct tcccaggggt ggggaagtgt aaacagtcct 600
 tcantaatgt tcccatcttt gatcttcctc ancagttnta ctcanaaaaa aaa 653

<210> 2804

<211> 761

<212> DNA

<213> Homo sapiens

<400> 2804

ggttatatth tagcacttgt ccattcagac agccattagc acggcctaata acactgacgc 60
 tggttcatgt ccgcttacct cctggattct cagcatcttc aaccgtggaa aagccttcaa 120
 aagtacatag agctctttat agtaaaggta ttctattgat ggcagcctca gaaaatgagg 180
 ataatgatat tttatgggtgt gtcaaccatg atacttttcc ttccaaaag ccaatgatgg 240
 aaaccagat gacagctggt gttgatggc attcctgggc tctttctgcg atagatgaat 300
 tgaaagtaga taaaataatt acacctttaa acaaagatca tattccaata actgattcac 360
 cagttgttgt acagcagcac atgttacctc cgaagaaatt tgttctcctc tcagcacagg 420
 ggagccttat gtttcataaa cttagacctg tagatcaact gaggcattcta cttgtgagta 480
 atgtgggagg agatggagaa gagattgaaa gattctttaa attacatcag gaagaccagg 540
 cttgtgcaac ttgccttatt cttgcttgct ccactgctgc ctgtgatana aaantatctg 600
 cctgggctac tcgggctttc ttttaagtatg gtgggtgaagc acagatgana ttccaacca 660
 ctcttccgcc tccaanttat gttgggtccca tcttgggggt cctgtctaa tccnagttcc 720
 cccgttccca atggtantcc caacccaaat cennctttt t 761

<210> 2805

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2805

```

agtgacgtcg cggccaaaac aagcccgggc ttggaggcct gtactgaagc tggcctcaga   60
tgggaaggcc cgactcgctg tctgctgtcg tcggtggtcg cgagaccttg cactctcacc  120
gggtcggcct ccagcccctg tgcccgggat ccgctcgccg cggatgancg agagtttctt  180
cctgggactt ttcgggcaca gctggccggt ggcgacataa cggactttct ttcctgcaag  240
agtctcccct ccagcgggag acagcgggct cctgtctcgg gacgctggga cacctgtcgc  300
ctatTTTTaa atatccagat tccaagaaca cactggatac tgctcttaca aaaccaagan  360
gaaatcatga agaaatgttt tagttattga aactacagtt gaaatcatgg atacatcaac  420
aaatctggat attggagccc ancttatcgt ggaagaatgt cccagcactt atagcctaac  480
tggcatgcca gacattaaaa tagaacatcc actggaccca aattcanaan aanggtcagc  540
tcanggtgtt gccatgggaa tgaaattcat attgcctaac cgatttgata tgaatgtgtg  600
ttctcnattt gttgaaatcc ttaaataaan aaaatantaa aaatattcna gatcaggtta  660
actctna                                           667

```

<210> 2806

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2806

```

tgtgctcggt ggcccaggtg ttcactctgg gcttgccctc ccgcacgccc tcagtgtggt   60
ttgggcccac agaggtgtcc acagcttgtg ccaccgccgt gctgggcaat cagcttgga  120
ctgcagttgg ctttttgcta ccaccagttt tagtaccacaa cacacagaat gacacaaatc  180
tcctggcttg taatatcagc accatgtttt atggaacatc agctgttgcc acacttttat  240
ttattttaac agcaattgcc ttcaaagaaa aacctcggtg tccaccaagt cnggctcaag  300
cagctcttca agacagtccc cctnaanagt actcctataa gaaatcaata agaaacctgt  360

```

ttaaaaaacat tccttttgtc cttctgttga tcacttatgg tatcatgact ggtgcctttt 420
 attcantctc aacgttttta aatcaaatga tattgacata ttatgaggga gaanaaatct 480
 atgctggaan gattgggcta acgctagtat tancgtggaat ggtgggcncct attcctttgtg 540
 gcttatggct ggattatact aaaacataca aacagactac tctnatagtt tatattttgt 600
 ctnttatngg gaatngt 617

<210> 2807

<211> 670

<212> DNA

<213> Homo sapiens

<400> 2807

ccatagaaag gcaatcaagc ttactccctg caatcggagt caatatcaat tcttgctcaa 60
 gcaaacatgt tttacagtgt tggcgcaatg gcaggaacta gtcaagggca ctttcagatc 120
 tggaagagg aaagagaaaa tcactctttt gtgtttctta aacatgccaa tcaagcaaga 180
 aaattttattc cacccttca tatttgctct aaaatctggg gccagtagtt gaaatgtgat 240
 cttgttcttt ctcagccttt tggcaattta atgccaaata ttccaaatgt tagatgaatg 300
 gcagtaataa aatgattcaa atgtttgata aatacaagct gagagcaaaa tctggactct 360
 gaaaaatcgg aactatttta tcatgttgct aaaatgagag catcattttc ttccctctct 420
 gtaagtgcgg tagtttaatt tcctaaaaaa agttgctagt gccttgttta agatgatcat 480
 gttatcattt catgtggata ttattggtct aattagaagg agaagattga ttggatttac 540
 tttaaagaaa attatctcct atgtctcttt gaactcagga atagaaaatg accaagaagc 600
 acatctcttt cagatatgat ttttgccctc nctggggatg ttnaanccga ataggttcna 660
 catatgctca 670

<210> 2808

<211> 772

<212> DNA

<213> Homo sapiens

<400> 2808

caactcctcc aaggctcaaa atttcttcag aatctagttc ctcatagatc ttatgtttca	60
accatgatct tggaagtagt gaagaatagc gttcatagct gggacatgt tactcagggc	120
ctcgtagaac ttggtttcat tttgatggat tcatatgggc caaagaaggt tcttgatgga	180
aaaactattg aaaccagccc aagtctttct agaatgccaa accagcatgc atgtaagctc	240
ggagctaata tcctgttgga aacttttaag atccatgaga tgatcagaca agaaattttg	300
gancaggctc tcaacagggt tgttaccaga gcatcttctc ccatcagtca tttcttagac	360
ctgctttcaa atatcgatcat gtatgcaccc ttagttcttc aaagttgttc ttctaaagtc	420
acagaagctt ttgactatct gtcctttctg ccccttcaga ctgtncaaag gctgcttaan	480
gcagtgcanc cccttctcaa agtcagcatg tcaatgagag actgcttgat acttgctcctt	540
cggaaactat gtttgccaac cagcttgatg cccgaaaatc tgcanttgct gggtttttgc	600
tgctcctgaa aaaattttaa gttttaggca gncgtgcatc ctctcantgc agtccagtct	660
ctcaatgtca gtcaggttca tgttggaatn tcacagccat tacaattctg tcccnatgaa	720
aactttttgn cttgaaatca tgggatantt tgaaggaaaa tgcttnaaac ca	772

<210> 2809

<211> 638

<212> DNA

<213> Homo sapiens

<400> 2809

ctcgcccgcc gtaggccggc ttggaggctg ggggagggcc cagaagtgga ataattcagg	60
aaagtgcagg ttctgggaag tctcggtggg ttccccgcaa aatcaggctt gtagtcagt	120
gcgcaatcgt ggctcactgc agcctccatc tcccggggct caggtgattt tcccacctca	180
gctttcccga gtagctggga ctacagagat ggcatctcac tatgttgccc aggtgatct	240
tgaactcctg acctcaagt atcctctctc cttggcctcc taaagtgtg ggattccagg	300
tgtgagccac ttcaccacgc cacatttata catcttgtaa aatattgctt tgttttttgg	360
tgcatttcaa agaatcactg accctggagg atgtggctgt ggagttcact tgggangagt	420

ggcagctcct cggccctgct cagaaagacc tgtaccgaga cgtgatgttg gagaactata 480
gcaacctcgt gtcagtgggg tatcaagcca ncaaaccaga tgcactcttc aagttggaac 540
aaggagacca tggacagtan aaaatgaaat ccacagccaa atctgtccag aaatcaanaa 600
agttgacaat catctacna tgccctcnca aaagccaa 638

<210> 2810

<211> 646

<212> DNA

<213> Homo sapiens

<400> 2810

aactgagtgt gacgtcagaa tcaccatggc cagctatcct taccggcagg gctgcccagg 60
agctgcagga caagcaccag gagccccctcc gggtagctac taccctggac cccccaatag 120
tggagggcag tatggtagtg ggctaccccc tggtagtggt tatgggggtc ctgcccctgg 180
agggccttat ggaccaccag ctggtggagg gccctatgga caccccaatc ctgggatgtt 240
cccctctgga actccaggag gaccatatgg cgggtgcant cccggggggc cctatgggtca 300
gccacctcca agttcctacg gtgcccagca gcctgggctt tatggacagg gtggcgcccc 360
tcccaatgtg gatcctgagg cctactcctg gttccagtcg gtggactcag atcacagtgg 420
ctatatctcc atgaagganc taaagcaggc cctggtcaac tgcaattggt cttcattcaa 480
tgatgagacc tgcctcatga tgataaacat gtttgacaag accaagtcag gccgcatcga 540
tgtctacggc ttctcagccc tgtggaaatt catccagcag tggaanaacc tcttccanca 600
antatgaacg ggaacgctcg ggctccatta nctacacana acttca 646

<210> 2811

<211> 422

<212> DNA

<213> Homo sapiens

<400> 2811

agactgctgt gctagcaatc agcgagattc cgtgggcgta ggaccctctg agccaggtgt 60
 gggatatagt ctcgtggtgc gccgtttctt aagccggtct gaaaagcgca atattcggat 120
 gggagtgacc cgattttcca ggaactgaag ttaaaagatg aagaatgtga gaggctttca 180
 aaagtgcgag atcgacttgg acaggaattg gaagaactca cagctagtct atttgaggaa 240
 gctcataaaa tggtagagaga agcaaatac aagcaggcaa cagcagaaaa acagctaaaa 300
 gaagcacaag gaaaaattga tgtincttcaa nctgaagtag ctgcattgaa gacacttgta 360
 ttgtccagtt ctccancatc acctacgcag gagcctttgc caggtggata gacacctttt 420
 aa 422

<210> 2812

<211> 517

<212> DNA

<213> Homo sapiens

<400> 2812

gctcccgggt cagctggtgc tggcgtcagg cgctgggchg gctcgccagg acctggcaag 60
 gcttgtttac tatggccgat gatctggagc agcagtctca aggctggctg agtagctggc 120
 tgcccacgtg gcgccccact tccatgtctc aactgaaaaa tgtggaagcc aggatcctcc 180
 agtgtctcca gaataagttc ctggccagat atgtatccct cccaaccag aataagatct 240
 ggacggtgac tgtgagcccc gagcaaacg accgcacccc cttggtgatg gtgcatggtt 300
 ttgggggchg cgtgggtctc tggatcctca acatggactc actgagtgcc cgccgcacac 360
 tgcacacctt cgatctgctt ggcttcgggc gaagctcaag gccagcattc ccaagggacc 420
 cggaaggggc tgangatgan tttgtgacnt ccatnganac atggcgggag accatggggg 480
 atccccaaca tgatcctcct ggcggcacag tttggga 517

<210> 2813

<211> 567

<212> DNA

<213> Homo sapiens

<400> 2813

```

agatggcgcg gagcgggagg cggccctgga gcgaccccgaggaggactaagc gggaacggga 60
ccagctgtac tacgagtgt actcgacgt ttcggtccac gaggagatga tcgcggaccg 120
cgtccgcacc gatgcctacc gcctgggtat ctttcggaac tgggcagcac tgcgaggcaa 180
gacggtactg gacgtgggcg cgggcaccgg cattctgagc atcttctgtg ccaggccgg 240
ggcccgcgcg gtgtacgcgg tagaggccag cgccatctgg caacaggccc gggagggtgt 300
gcggttcaac gggctggagg accgggtgca cgtcctgccg ggaccagtgg agactgtaga 360
gttgccggaa cagggtgatg ccatcgtgag cgagtggatg ggctacggac tcctgcacga 420
gtccatgctg agtccgtcc tccacgcgcg aaccaagtgg ctgaaggagg gcggtcttct 480
cctgccggcc tccgccganc tcttcataanc ccccatcagc gaccanatgc tggaatggcg 540
cctgggcttc tgganccagg ttaanca 567

```

<210> 2814

<211> 729

<212> DNA

<213> Homo sapiens

<400> 2814

```

aaaagacgcc gggcgcgcg ggcgcgggag aagtgcggcg gagcggcgcc tgcattagca 60
ggtatgcaaa gaagcctttt caccctgatg tccttagaga taatatggat cagtccagag 120
ttctcctctg ggtgaaagca gaacccttta tagtgggtgc cttgcaggtc cccctccat 180
ccaagtttag tcttactat ctcaggaaga tatccaccta tgtgcaaata cgggccacag 240
aaggagctta cccgcgcctc tactgggtcta catggaggca catcgcttgt gggaagctgc 300
agttggccaa ggacctggcg tggctttact tcgaaatatt tgatagtctt tcaatgaaga 360
cacctgagga gcgcctggaa tggctctgagg ttctgtccaa ctgcatgtct gangaggaag 420
ttgaaaagca ganaaatcag ctttcagtgg acacgctaca gtttctgctc ttcttataca 480
ttcaacagtt gaacaaggtc tccctaanga catctttgat tggcgaaaan tggcccagtc 540
ccagaaacaa atctcagtct cctgacctga ctgaaaaatc tnattgtcat aataagaact 600

```


ggaatgatta cagtccecaa acttttgtct atgaatcatc tgtctgatct cctccaancc 660
cctgctttta aatccaaaac aactcncctg cntcatttca ttcaacccat antantctaa 720
ttgtctcca 729

<210> 2815

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2815

tcttcaccac tgctctccca gaggtccagg tccgggagat gacagtggct cccagaaagc 60
ccaggattca atcgctgaga gagtgccttag gcccgaatgc cggcccaaat cgttctactc 120
accgtgtcgg aggccgagag cgatgagagt acagggaagt gaggaagagg gggtggccgc 180
caggctcctc cgcttccttg ggtccaccgc ggatccctcc cgcttgtcag gaggcggcca 240
gcgggtaagc cgactggcgg aaatgcgaga gaggagaagg gaaaggtgga gggctaaagg 300
ggcaaaactga gaggaggcgg atcccgcac cgacactggg atcgtttccc ctcgcaaagc 360
gaacccaaaa tggcggcggc agcggcggca gcagaatggc cgcggcagct cctccagagg 420
gagggtgcta agggcgccta gcgacacccc caacctccca ctctccctc ctcgcgttct 480
tccccacggt cccccgttc gcccgactcc ggccatgtta cgcgcacgtc agcccgcacg 540
cgttcgaatg tctacgggct cctcgctggc tgctcccacc aaccaccacc ttcggccgtc 600
ctgcgaacca gccatcccgt acgcgctcac ccacgggaac ctctcncctc anttctccct 660
cccctcn 667

<210> 2816

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2816

tacaaatcat tcatgaaaac tgaagctcag tctcccaggg gtaagtcctg ggccacgtgc 60
 aaacaatggc aaatccagct cttccatgat agagaaggca aacacaccca ctttcatect 120
 gagcctaaaa ggccacctct gancacttgg gcagccactc ctctgggcct cagagggcca 180
 tgagcttggc caggtangca cagcggcggg gaagtcacag ctgtcaggta ccggccatgg 240
 tgcaggtggg aataggagat gccagagctg ctttagctga ggaaagcaaa cagtcagcag 300
 tgctcaaagg agcaaaactt cgaatgtgca cattgacccc tgacacctgc aagcataaca 360
 cagatcctaa gactagagtg aagtaggaag aagaattaga aaatccagtg gatgtcctga 420
 gtatagggaa ccanggccgt tgaaaatcag taaagggtga ttacctgggg cgagaccggg 480
 tgactgtggc agtgcaggtg aangtaccct ggaccttctc agttcgctgg cacataaggc 540
 tccnccaata aagcgtggtt ctctctgtca tacacacaca cacacacaca cacacacaca 600
 cacacacaat gattgggang gctatatnat ccancattag cttcctggtn gtgccaacc 660
 atgcttgatc gggaaatfff tttttattat tattatfff ttaacctgtt acctnaaggc 720
 atttctccga atgttgaaaa agaaaaaagg gaaatcccaa aaccnantcc nttttgccct 780
 gccatatttn ggcttg 796

<210> 2817

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2817

cttccttttc tccatggcta cactgttgag gaccagcttc agtgaccctg gagtgattcc 60
 tcgggcgcta ccagatgaag cagctttcat agaaatggag atagaagcta ccaatgggtg 120
 ggtgccccag ggccagcgac caccgcctcg tatcaagaat ttccagataa acaaccagat 180
 tgtgaaactg aaatactgtt acacatgcaa natcttccgg cctccccggg cctcccattg 240
 cagcatctgt gacaactgtg tggagcgctt cgaccatcac tgcccctggg tggggaattg 300
 tgttgaaaag aggaactacc gctacttcta cctcttcac ctttctctct ccctcctcac 360
 aatctatgtc ttgccttca acatcgtcta tgtggccctc aaatctttga aaattggctt 420
 cttgganaca ttgaaaagaa actcctggaa ctgttctana antcctcatt tgcttcttta 480

cactctggtc cgtcgtggga ctgactggat ttcatacttt cctcntggct ctcaaccana 540
caaccn 546

<210> 2818

<211> 488

<212> DNA

<213> Homo sapiens

<400> 2818

ctttcgcgtc cccaccctc tcggctccgc ctggcagcag ctccgccgcc cagaggcgtc 60
cgagaccctc cgactcgtgg gtacgcatag gcctcgccag cgagccttgc ccaggcaacg 120
agtcgccagc ccgccccctc gccgcggggt aggtctcacc tcgccaccag tacgtcttgg 180
acaagtagtg ccaggtctga tgccgggtgt ggtgagtgcc gccgggaccc aggtgcgccg 240
cctcgatgag gtcccggcgt cgctccgggt gcagcaccac ctccagctcc gcgaaggtct 300
tgcggtgccg ctgccgccgc tggtaatata gaatccgcc gcgcaccacg tagcaggcgg 360
nagctttttn gattttacgc ttgacattgc cctcgggtgcc cggcgcatac agctcgcgct 420
cgttcgtcag gtaacacagg atggcccgggt anctttctc gcttgacatc ncggacgcgg 480
ctccctna 488

<210> 2819

<211> 639

<212> DNA

<213> Homo sapiens

<400> 2819

gtagtagctg ccaggctgtc ccccgccctg cccggcccga gccccgcggg ccgccgccgc 60
caccgccgcc atgaagaagc agttcaaccg catgaagcag ctggctaacc agaccgtggg 120
cagagctgan aaaacagaag tccttagtga agatctatta cagattgaga gacgcctgga 180
cacggtgcgg tcaatatgcc accattccca taagcgcttg gtggcatgtt tccagggccca 240

gcatggcacc gatgccgaga ggagacacaa aaaactgcct ctgacagctc ttgctcaaaa 300
 tatgcaagaa gcatcgactc agctggaaga ctctctcctg gggaagatgc tggagacgtg 360
 tggagatgct gagaatcagc tggctctcga gctctcccag cacgaagtct ttgttgagaa 420
 ngagatcgtg gaccctctgt acggcntagc tgagggtggag attcccaaca tccagaanca 480
 gagggagcag cttgcaagat tgggtgttnga ctgggattca gtcanagcca ggtggaacca 540
 agctcacaaa tcctcnggga accaactttc nggggcttcc atcaaaaata gatctctnaa 600
 gggaagaaat ggatgaagct ggaaataaan tanaacagt 639

<210> 2820

<211> 633

<212> DNA

<213> Homo sapiens

<400> 2820

ggcagccctc cccagtggag cccccgagga cccttttatt tctgcaggtt attgcttgat 60
 gacttgggaa tgaattcttg ggacagaagg aagaattttc atctattgaa gaaaaattca 120
 aaattattga gagagctgaa aaatttggac tcccgccagt gccgtgagac acacaaaatc 180
 gcagtgtttt acattgctga aggtcaagaa nacaagtgtt caatcctctc taatgaaaga 240
 ggaagccaag catatgaaga ctttgttgct ggacttggat gggaggtgga tctctccacc 300
 cactgtgggt tcatgggtgg ccttcagcgc aatggcagca ccgggcagac ggccccttac 360
 tatgctacct caactgtgga agtgattttc catgtttcca ctggaatgcc gtcagactca 420
 gatgattccc tcaccaaaaa gcttcgtcac ttggggaatg acgaggtcca tatcgtctgg 480
 tctgaacact ccanagacta ccgcaggggt attatcccaa ctgccttttg agatntttca 540
 ctcattattt acccnatgaa gaatcncatg ttcttcatcg cgataacgaa aaaacctgan 600
 gtteccctttt ttgggcctct gtttgatgga ncc 633

<210> 2821

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2821

```

ggattggaag cagaggaagc tgaagaaaag taatgtagtt tccttaaagg catacaaagg   60
actggcagaa gtcgctgtga agagcttgtg tgagctgttg gtggcactac ctcattttaa  120
ctttcacaaac aacatcatcg tattgattgt ccctctcatg aatgacatgt cnaaattgat  180
atctgaaatg tgttgtgaag ctgtgaagaa actctttaag caagataaat taggccaagc  240
ttctcttggt gtaattaaag tgatttctgg ttttgtgaag ggcagaaatt acgaagttag  300
gccaggagat gttaaaaaca tttttatgcc tgagaatcna ggaagtagaa gtgaaaaaag  360
atacagaaga cattgataga ccagnaaaat ttatgacttt caaagaaaag agaaaatctc  420
tntcgagaat gcagagaaaag tgggaagaaa gcngaag                               457

```

<210> 2822

<211> 689

<212> DNA

<213> Homo sapiens

<400> 2822

```

gcagcancat atctccctat tatagaccag aatacaggaa tatcgagcac ttaagtaact   60
tagctgactt tacacagggtt ataataaaga gttgagggtc ataaccaggc tgttgactcc  120
aaaggccata attttactct cagctaccaa catagcctgc gtcttagcta gttcactcag  180
ttacaccaac ccatatctgc atagatgcag tcttttttag gagggaaata ctcagtaatt  240
tctttttatt taaccaaagt ctttgcattt tttaatctgg agtctatatt ttacatacac  300
tgtgagtgaag gagatctctc aatattagaa ttgtaaatgt ttgctgatct ttgcattttt  360
atttccataa tccaaatgag tcataatcca tatgggtttt ggtttttaaaa tggattagta  420
aatggttaaa ttaatagacc caatttcaaa ataaggtttt ttttgaattc tactctcttg  480
atgttgcacc tgaatacaca agtaaatatg gcctgctatg gcaggctaaa agtgaccaag  540
tttttgaaac taaatccaca ttgggagcag ttttggacag acagaccac ttcaagtgct  600
ggtagaaata acattatcct gaggggatag tccaactana nagtactctg ttaaaattag  660

```

catccagaaa atctctaaan antangggc

689

<210> 2823

<211> 672

<212> DNA

<213> Homo sapiens

<400> 2823

ggaagtcaga tgaaaaaatt gtgattcacc ataagccatt ggagatccac atgggagcca 60
actctctgcg gtgaaaagaa agggattatc tcagacagta agccaggagg aaagaaagag 120
acaagaggct atctttgaag tcatatcctc tgaacattca tatttactca gcttgagat 180
cttgatacga atgtttaaaa attctaaaga actgagtgat acaatgacta aaaccgagag 240
gcaccatctt ttctccaata ttacagatgt ctgtgaggca agcaaaaagt tctttataga 300
gttggaagca agacatcaga ataatatctt catagatgac ataagtgaca ttgtggaaaa 360
acacacagca tccacatttg acccatatgt gaaatactgc acaaatgaag tctaccaaca 420
acgaacacta caaaaattgt tagctaccaa tccttccttt aaggaagtat tgtnaggat 480
tgagtcccat gaagactgtn ggaacttacc cntgatctct tttctcattc tccccatgca 540
naaggtgacc cgccttcccc tgctgatgga tactatctgt caaaaaacac ctnagggact 600
ctccgaagtn tgaagtctgc caaaagancc ttggaaggaa gttagccnag ttnngttcga 660
ctatgcatg ga 672

<210> 2824

<211> 681

<212> DNA

<213> Homo sapiens

<400> 2824

tagcattaaa gccttaatga atgggtgtca tttctacca gcctaagttt catcaagaac 60
aaatacaagt atattttgaa tttagatacc tcctttaatc catttgcat caactgtttc 120

aaatcatgag aaaaatacta ggaaatttaa gttttagtaa aactctgtca agttaacttt 180
 gaattttata tcaagaagaa actattgaga aaaaaacctc atgcttttac acaatagtat 240
 actattttct taacagcaaa cagacatttt tctcttacgt accagctcat aatatgtctg 300
 tctaaaattg ttgggacgga tgttttgtcc caaagacttt ctcagagttg tgcacttagt 360
 gttgagccat aactactgtc tggatgccca gaggaggcac atataatttt attattttta 420
 aatagcatct gttagccagc cacggtggct catgcctgta atcccancac gtggggaggc 480
 tgaagcangc ggatcatgan gtcaggagat tgagaccatc ctggctaaca cagtgaacc 540
 ccatctctac taaaaataca aaaaaattag ccaggcatgg tggcgggcgc ctgttctccc 600
 ancaactcag ggaggcccta cctcccacct cagtaggana aatggtgntg aaccccgggg 660
 aggcggganc ttggcantgg a 681

<210> 2825

<211> 406

<212> DNA

<213> Homo sapiens

<400> 2825

aatgcggaaa aaaaaaaaaa aaaaaaggaa aatccttagc aggttctagc atgcaanagt 60
 tcagtaaag gttatcgta ttattatctt tggatatagta aanattggca tgtaacata 120
 cactgaggat ttagtaaag tggtgtaagt atggtgcatg ctctttgttt tgtttggcgt 180
 aacagcttta ttgagctata caacttacc atttaaactg tacagttcag taggctttag 240
 tgtattccca gggttgtaca tccatcaca tagtttcagg tagctctgca ttgggcaatg 300
 ctgttgggag catcaggaan agcttcccag gaggtcacat taagtggatg ttggcagaca 360
 ggacttagaa cagtggggag gaggttggtg tcccaagcan aancaa 406

<210> 2826

<211> 611

<212> DNA

<213> Homo sapiens

<400> 2826

```

gtcaccgtgg tcggcggcgg cggcggcggc ggcacanaac cgggtggtgga gccgccgagg 60
ccacctcgtg tatgcagaga ccatgtgtgt ctgatctgct gggatcctag agctggaaca 120
ggaggggtcac gcagcacaat gccagctctg cccctggacc aactccagat caccacacaag 180
gacccgaaga caggaaagct gaggacttca ccagcgctga tttgtacctg taactccatg 240
atacaaattt gatttaaagtg ggaggggggtc ctgcanaccc acatgagagg tggccttgaa 300
gaatccttgt ggtaccaca ggctctacag tttggaaact cgccaccccg agcagaangc 360
agaccggtat tttgtgttat acaaaccgcc ccctaaagac aacattcccg ccctagtgga 420
ngantacctg gaaacgcgcc accttcgtan ccnatgacct cgactggctc ctggccttgc 480
ctcncgataa attctggtgc caggtgatct ttgacgaaac tctacagaan tgcctggact 540
cctacctgcg ctattgtccc cncaaattcc acnaaggggt ngcctccncc ccttgaagtt 600
gtttaacatg c 611

```

<210> 2827

<211> 598

<212> DNA

<213> Homo sapiens

<400> 2827

```

aggcctgcgc ttccgctcgc gaggggggagg cgggacccgc gaggagtcgc gcggaggacg 60
gaggccacga tacctgcgtg gctggggctg cgggctccgg ggtcaccacc ctgggcgacc 120
cggangtggc gcctccgccg gccgcagctg gagaggagcg tgtccccaag ccggggggagc 180
aggacttgag caggcacgcg gggtcaccgc cgggcagcgt ggaagagcca tctcctggag 240
gagaaaactc acctggtggc ggaggctccc cttgtttgtc ctcccggagc ctggcgtggg 300
gttcttctgc gggaagagag agtgcgcgcg gagatagcag tgttgaaaca cgcgangagt 360
ctgagggcac gggcggccag cgctcagcct gcgccatggg tgggtcccggg accaagagcg 420
gggagccttt gtgtcctccg ttactgtgta atcaggacaa agaaaccttg actctgctca 480
ttcaggtgcc tcggatccag ccgcaaagtc ttcaaggaga tttgaatccc ctctggttac 540

```


aaattacgct tctccgcaca aanacttant ttattccttc tttttgcaat ttgctccn 598

<210> 2828

<211> 724

<212> DNA

<213> Homo sapiens

<400> 2828

ggtttgccta tccagtatgt actcttcttc cttgctaaca gaatcttgaa tttgcttgag 60
 ataatagtaa ataatttaa atacctccat aaatgccctt ccagctaggg tggatcatcta 120
 gtccattggc caataaacta gatcaaaagc tacttcatgg aaagctgttt tttccttgat 180
 acctatatct ttctgtaaag gactgctcag ctggcataag ctttctactt ttaacctgtc 240
 ttttctcttg tccagattgt gattcagtgt caaagtgggg cagtcattcg taagtgtga 300
 gcattgtgga gcaggagggg aaaggggcct gttctctcaa ggaccttcac tatccattca 360
 tttcctaccc ccagactctt gttagattgg gctgatccaa actcataata tgaatagatg 420
 gacattgacc aaagagacca gcagcagaac aaaagcataa acaaacatga gagtangcta 480
 attttaccac cctgagggtca aaaagtcttc atgagatctg gtcgtttgaa ancatgtacc 540
 acttccctct tcgtcactc tctccctccc gctccaccat gttgaagatt gtgcctgttt 600
 ctccttcacc ttctgcatg attgtaaatt tcctgaagcc tccccancca tgcctccttg 660
 tacaganact gtggaactga agccccctana acctggaaaa acatgtncat ttactttttt 720
 ngcc 724

<210> 2829

<211> 486

<212> DNA

<213> Homo sapiens

<400> 2829

aattatacct caagaaagt gtttttttaa aagacagcgt aaggggtggg gggcagttga 60

gatgaagcag gaaaactgtg atcagaagca aagctcaggg gctgtctggc ctggctgccc 120
 caagtcaaag cctgcatttc atacaggcaa tgtagggta ncccccaagc catgattcgg 180
 aaagataaat tgacccana aggaataggg ctgggtccct tctcccttga cagctccctt 240
 tctgtgtttt ttctggcaca agaaactctg tcatcttgta taaataggaa aaatttatgg 300
 cagttttccc tcttcttctc cctgggtggg tactangaaa ggtctanggg ganganggac 360
 ctgaaattcc aaaaatataa atgtggaaag actggaaggg gtcgangaat ctctttgcct 420
 gccttactct ggcccanct ctcctttccc ttgcatgtt tgaccatctg ggtnatnaag 480
 aaggtg 486

<210> 2830

<211> 267

<212> DNA

<213> Homo sapiens

<400> 2830

agaacgttgt gacagagcgg tggcgggctg agcggtttgc anccggcgtc ggggaacggc 60
 ggtaccgggc ggctgcgggg ctggctccac ccagcttgaa gtctcggcgt ccgcgtcctg 120
 cgggtgccctg gggctctccg aagaccttgt nccgcgcgg ttctcttggg ctggctttgg 180
 acgacncttt ccccttctg ctgcctaaga tccgccgaca ttaatccnt cctagtggtc 240
 cacggcggcg gaaccgggtcc cntctcc 267

<210> 2831

<211> 385

<212> DNA

<213> Homo sapiens

<400> 2831

acctcccgga ngctctgctg gtgcaggccc cgcattggag ggctcgattg gctgcccggc 60
 tggcactgac gtccccttgg agctgggtgg caaaagagat aaacagccat gtgcaactct 120

ctacactata tttacagct gcggcggaaa aggcaggga gcagccacgg tggcggctct 180
 gggggcanct cttgtcttcg gggaaaaagc ccttggaacc gggctggcat ccgccttctc 240
 gcggtgagcg aagtcacat gccagcttcc caaaaccggg cccgtgcccg ggaccgcaac 300
 aacgtcctca accgggctga attcctgtcc ctgaaccncc cccccaaggg gggcccngaa 360
 ccccccanct cgggcagaaa gcctc 385

<210> 2832

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2832

accgtcttcc gccgcacgtg gattcagcgc gatgcccaaa tccaagcgcg acaagaaagt 60
 ctccttaacc aaaactgcc aaaaaggctt ggaattgaaa caaaacctga tagaagagct 120
 tcggaaatgt gtggacacct acaagtacct tttcatcttc tctgtggcca acatgaggaa 180
 cagcaagctg aaggacatcc ggaacgcctg gaagcacagc cggatgttct ttggcaaaaa 240
 caaggtgatg atggtggcct tgggtcggag cccatctnat gaatacaaag acaacctgca 300
 ccangtcagc aaaagggtga ggggtgaggt gggctctcctg ttcaccaacc gcacaaagga 360
 agangtgaat gagtggttca cgaaatacac agaaatggac tacgcccgan ctggtnacaa 420
 agcagctttc actgtgagcc tggatccagg ggccctggaa ncanttcccc cactccatgg 480
 ancc 484

<210> 2833

<211> 540

<212> DNA

<213> Homo sapiens

<400> 2833

gctgttatgg ccgcctcctt gaggtagtat ccgcacatgg gaattctagg gccgcangtg 60

tatttacggt aactgtcgcc actagatttc agcgcctttg gactctcctg ttttcacttt 120
 cttttgttga ctcccggttg gccctcgtgg gagcctgttt tggctgcagc ggtgtctggg 180
 gtgatgtgga ccccgagct ggcaattctg aggggattcc ccactgaggc tgagcggcag 240
 caatggaaac aggaggggggt cntcngttca ganagtggat ctttcctaca attgctgctg 300
 gaagggaact atgaagccat attcttaaat tcaatgactc aaaatatatt taattcaaca 360
 acaaccgctn aagaaaagat tgatagctac ctggagaagc aggtagtaac attcctggat 420
 tactcaacag atttgacac aacggaaaga caacagtga tatttctact tgggtgtgagc 480
 agtttgcaac tttttgttca nancaactgg gacngggccc cctgttgact tacnccctcn 540

<210> 2834

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2834

cattccatgc agacaagcgt gtccttcatg agacaggatt cagtactgag ctagatcgtg 60
 taaagaatct gcctcattgt gaaacggaaa tatttgaagt gagatttgac ccacaggggg 120
 ccaatcttcc tgttgaanc aaagaagtca ttctgcccac caaggtgggt ggagggccaa 180
 cagttcacat ctgtctccaa gccaaaggta ccattccaac catgactctc tctcgtggaa 240
 aagtggactt tgccacaatt cagtgtggac agtgcctggg ggaaactatt cagctttcca 300
 atcatctcca agtccttgt gaatggttcg tccagagcca aaagcctgtt gacaagctgg 360
 agaaacacat gccgaagtac ttaagacaga aactacgcgc tgaattaaag ccaaagacac 420
 ggatcttcga aatccanccc atttctggag tcttgatcc tgggtgagaaa tccnacgtgc 480
 aagtnaaatt catgccaaaa naaaaaaaat tctacagccc aaccctgggtg tttcanattg 540
 cccana 546

<210> 2835

<211> 458

<212> DNA

<213> Homo sapiens

<400> 2835

```

gcgc atgcnc gcgcccgggc ggcgcgggat ctgggtctgg ggatgtggta ccggctgctg 60
gcggcgggccg gcaatanaac ggtggccagg ccgctggcct tgctgtggcg atgtggtggc 120
ccaggangcg gcaggacggc caanaccagc gcgagggccc tgggcaaggc ccgacagtgg 180
ttatggccag tgagaatgtg cgggtgttgca ttgcagaaga agctaggaaa gctcatctgg 240
cctcctgttc cagtgccttc aggggatcca cggtcagaag ctgactctgc aggcaagacc 300
gacgttattt tcctggtggc tgtgttcaaa accacccaaa gggtttgaga aatactttaa 360
gangagtgga aggaacacaa actgagaaac atcnacagca ccaaaaaaag agactggtga 420
actaganaat gctgantctg gaaganacgg aggccgga 458

```

<210> 2836

<211> 634

<212> DNA

<213> Homo sapiens

<400> 2836

```

ggataaaanc ctaagagttt gggaatggga tatccctgtg gatttcaagt acatagcaga 60
accagtatg cactcaatgc ctgcagtgc tttgtctcca aatggaaaat ggctagcatg 120
ccaatcaatg gacaacaaa tcttaatttt tggagcacag aacagattta gattaaataa 180
gaaaaaaatt tttaagggcc atatggtagc aggctatgct tgtcaggtgg acttttcacc 240
agacatgagt tatgtgattt caggagatgg aaatggaaaa ttaaactttt gggactggaa 300
gaccacaaaa ctctacagtc gatttaaagc tcatgataaa gtgtgtatag gtgcagtgtg 360
gcatcctcat gaaacttcta aggtcataac atgtggttgg gatggtctca ttaaattgtg 420
ggattaatga gattaatcct taaactagct gggatcattt ttgatccatt gtcataatta 480
tatttaatta ttaaattgtat ctgatgataa cttgatttac agataatgtt gatgacattg 540
accctttgtt taaaaaaaga aactgtaaat ttgacataat ttcatttgca acttcatttt 600
gttttttata aatgttattt atacagaaag ttgt 634

```

<210> 2837

<211> 644

<212> DNA

<213> Homo sapiens

<400> 2837

```

ggaggaggcc gcagcagtcg ccgcgcgaac atggcggccg aaatccactc caggccgcag   60
agcagccgcc cgggtctgct gagcaagatc gaggggcacc aggacgccgt cacggccgcg  120
ctgctcatcc ccaaggagga cggcgtgac acggccagcg aggacagaac catccgggta  180
tggctgaaaa gagacagtgg tcaatactgg ccagcattt accacacaat ggcctctcct  240
tgctctgcta tggcttacca tcatgacagc agacggatat ttgtgggcca ngataatgga  300
gctgtaatgg aatttcacgt ttctgaagat tttataaaaa tgaactttat caagacctac  360
ccngctcatc agaaccgggt gtctgcgatt atcttcagct tggccacaga gtgggtgacg  420
agtaccggcc acgacaagtg tgtgagctgg atntgcacnc ggagcgggaa catgctcggg  480
aggcacttct tcacgtcctg ggcttcgtgt ctgcaatatg actttgacac tcagtatgct  540
ttcgttggtg attattctgg gcngatcacc ctgcttgaaa ctigaacaga aaacgtgttc  600
agtcctcacc naccctcnaa aggaaatgaa agttttgttn ccen                      644

```

<210> 2838

<211> 539

<212> DNA

<213> Homo sapiens

<400> 2838

```

gctttcccag ctagtcgaat cactggtgca cctccggaat ccgaggttcg cattgctctc   60
ggacagagtt ctgcctcccc agtactccca aactcccagt cctgtgcacc aatgaggtcc  120
agctctgagg cttctttcct ganaaaaaaa tttggaagtc cgtgactgtt tcctggagga  180
gctganaana ggaagctcac ttccggcgta gggaggcttt ctgacccgga atggaggagg  240

```

cggagganct gctcttggag gggaagaagg cgctgcaact cgcccgcgag ccgcgcttgg 300
gccttgactt angatggaac ctttccggag aaggctgtac gcagggcctc aaanacgtcc 360
cacccgagcc gacccgagac atcctcgctt taaagancct tccccggggc ttggcccttg 420
gcccctcact cgccaaggaa cancgcttgg gggctctggtg tgcggggac cccctgcagc 480
ccggcctgct gtgggggccc ctggaanaag antctgcctc caagganaag ggcgangga 539

<210> 2839

<211> 764

<212> DNA

<213> Homo sapiens

<400> 2839

gggctccgtt tgaaacatgg cgcgggctgg ccctcggtg gtgctgagcg aggaggcgg 60
tcgggcgaan agcggcttag ggcctcaccg cgacctggt gagcttcagt cattgtctat 120
tcctggaact taccaagana agatcaccca cctgggacat tctctgatga gtttaacagg 180
tctgaaatct ttggatctct cgcgcaactc cttggttagt ctggagggca ttcagtacct 240
gactgcattg gagagtctca atctctacta caactgcac tcctcgtttg cgaagtgtt 300
cggctccacg ccttaaccga gctcgtggat gtggacttcc ggctgaaccc cgtggtgaag 360
gttgagcctg actaccgcct ttttgttgtg cacctgctcc ccaagctcca gcagctggac 420
gatcgccccg tgagagcaag cgagcggaag gcttcccac tgcattttgc atcagaggac 480
tactcgact ccaaagagag cgtcccagct tctttgaaag agggcagacc acaccacccc 540
aganccaagt gcaccgaagc cttggccaag caaacctgg tcatggatgc ggatgacgaa 600
gcagtcctga acctcattgg cagaatgcga atggggaact cggcaggnet cccgggaaca 660
cgaacttcac cagaaagggn gtnaggccca atctcgttgg ttcccaaaaa tccaaacttc 720
ttnttgaacc ccgccatttg gttacantta ccagtnttg ggga 764

<210> 2840

<211> 572

<212> DNA

<213> Homo sapiens

<400> 2840

```

ggccccaccc ccggcggcgc agcccccccg cccgcgcgtc cctcgggtcca cctgcagcag 60
ggaggaagac aggcaatccc tccggctgtc cgaccaagag aggccggccg agcccaggc 120
ttgggctttt gctttctggc ggagggatct gcggcggttt aggaggcggc gctgatcctg 180
ggaggaagag gcagctacgg cggcggcggc ggtggcggct agggcggcgg caaataaagg 240
ggccgccgcc gggtgatgcg gtgaccgctg cggcaggccc agganctgag tgggccccgg 300
ccctcagccc gtcccgccgg acccgctttc ctcaactctc catcttctcc tgccgaccga 360
gatcgccgag gcggcctcag gctccctagc cccttccccg tcccttcccc gccccgtcc 420
ccgccccggg ggccgccgcc acccgctcc caccatggct ctgaagaaaa tccacaanga 480
attgaatgat ctggcacggg accctccanc acagtgttca ncangtcctg ttggaaatga 540
tatgttccat tggcnactac aataatgggg cc 572

```

<210> 2841

<211> 592

<212> DNA

<213> Homo sapiens

<400> 2841

```

ggttaatgtt gctatcttaa gcactggcat ttgggcaaaa cgtgactgtg ttctgtggga 60
naatccaaag gcattattca ctctagttag aatagaattg ggtggctaaa cagggtgtgt 120
ggtacccaaa anattaaatg ttacatgtcc ttttagtcct tgaccaggtc tagccttggc 180
agaagcaagg gagccactaa gccaaactcc ctgtgcanac agaccatgtt tcaaggctgg 240
aagtagtgcc ctggcaacac acaaaaggaa cggtgaaatg gtaggcaaag tgaacttggc 300
tctgctggcc tctttggggt cacanaaatt gtccttgtg gtaatcttat atttctgtca 360
ggcacagggc caagaanctg tgtaacagac attactttgc ttgcatctct tttcatacc 420
ttttccctct gaagcagctt ttgcttagaa aacagtcctt tcaactctgcc tttcctccta 480
acttctgtg cctcttcatg ttctgtcan gctttttaa gcaacgaagc tgttganaa 540

```


cttaaatacct tgcaactgaa aaataagcta cttnaaggcg gtagaaatcn nt 592

<210> 2842

<211> 774

<212> DNA

<213> Homo sapiens

<400> 2842

gtcgggaccg gcaagatggc ggcgcggaaca gcgttcgggtg ctgtgtgccg ggcctcttgg 60
cagggattag ggaatttttc tgtaaact tctaaggga atacagccaa aaatggtggc 120
ttgcttctca gtaccaatat gaagtgggta cagttttcaa acctacacgt tgatgttcca 180
aaggatttga ccaaacctgt ggcaacaatc tctgatgaac cagacatatt atataagcgc 240
ctctcgggtt tggtgaaagg tcacgataag gctgtattgg acagttatga atattttgct 300
gtgcttgctg ctaaagaact tggtatctct attaaagtac atgaacctcc aaggaaaata 360
gagcgattta ctcttctcca atcagtgcac attacaaga agcacagagt tcagtatgaa 420
atgagaacac ttacagatg tttagagtta gaacatctaa ctggaagcac agcagatgtc 480
tacttggaat atattcagcg aaacttacct gaaggggttg ccatggaagt aacaaagaca 540
caattagaac agttaccaga acacatcaag ggancnatc tgggaaacac tatcngaaga 600
aaaagaagaa agccngtcct aaagcctcag ggaagccatt tttgcctaaa ttgaaatga 660
aggtgggcca aataaattat gtttaantgg aaaatgcttc ccactnaaaa taattganc 720
tgtcctaact gcctcccttg aattccccct gccncatcc actnaaaggc aggg 774

<210> 2843

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2843

ctgcctgcgt tagcggcggt ggaggaggag gcagagagga gtggaggcg gagtagacgg 60

aggaggctgc tgcagagaag aaagtgtcag agccggttcg gcttttagagt gtggtgaagg 120
 gtacttttca tggatcatgg aaggaaagcc aatgctcagg tgtaccaaca ttcgaccagg 180
 agagactgga atggatgtaa caagccgctg cacccttgga gacccaaca aactgccaga 240
 aggggttccc caacctgccc gcatgcccta tatctcagac aagcaccctc gacaaacctt 300
 ggaagtgtatt aaccttctga gaaagcaccg ggagctatgt gatgtggtgc tagttgtggg 360
 cgccaagaag atatatgccc atcgagtcac tttgtcagcc ttagtccctt acttccgagc 420
 tatgtttaca ggagaattgg cagagagccg tcagacagaa gtagtgatcc gagacattga 480
 cgagagggct atggaattac tgattgactt tgcgtntacc tcccagatna cagtagaaga 540
 aggcaatggt canactcttc tgcca 565

<210> 2844

<211> 704

<212> DNA

<213> Homo sapiens

<400> 2844

caaacgattc tcctgcctta gcctccccag tagctgggat tacagttgcc tgctgccata 60
 cctggctcat tttttttttt tttttaataa anacagggtg atctgtcagg tgatccatcc 120
 acctcagcct tccaaagtgt tgggattaca ggcatgagcc acagtgcgtg gcccaagtct 180
 attcttttct agtcatactg gcaatgtaga ttgaggagta agacatttac atgattctgc 240
 tcccactaca tgtcctttta attttcccca tcagagtagt aaaagccttc attctgatga 300
 tctggccagt ttctcatttg gctaatttgt ataaataaac atacggattt gaagcattta 360
 gtgaatatat agtcttttta tggttttttg atctaaagga tggttttgtg gcccttacia 420
 ctatttcaga taactgaccc agantccatt tgagaagtgt tcattacttt gatcagaata 480
 tggctcctgat tgtgattgtt tggattctag tgtttaatgt antaaaacct acatttattt 540
 tatgaaantc ccaanaactt tttccattt gagtgactga acatgcctcc ttcctctaatt 600
 gttaaaatat atttttggta aattgtgcc gaanggcatt tgccaaaaaa atttgtgcag 660
 caaaaaatnc ctgntncaa cccatttatg ntccccctat gtcc 704

<210> 2845

<211> 505

<212> DNA

<213> Homo sapiens

<400> 2845

```

tttacaatgg gcatagacct tacaaaacca tttgaatacc tttttgctac tgggaatctg   60
cgttctaaaa caggtcttgg cctcctacaa gattctggac tttgtgttgt ggctgacaag  120
ctgaacttca tacgtacct ctccatttc cgctgcgtgc acagaggggc tgattttgcc  180
aagatgagga ccaccacagt acgcaggctg ctgccagagt cctggggctt cttttgtccc  240
gtgcataccc cagacgggga gccctgtggc ctgatgaacc acctaactgc cgtatgtgag  300
gttgtcacac agtttgtgta tacggcatct attccagctt tactgtgcaa cttgggggtc  360
actccatttg atggagctcc ccaccgatca tacagtgagt gctaccctgt cctgctggac  420
ggtgtcatgg ttggctgggt ggataangat cttgctccan gcacgcana ttctcttcgt  480
cattttaagg tgttganaaa naaaa                                     505

```

<210> 2846

<211> 637

<212> DNA

<213> Homo sapiens

<400> 2846

```

tgtacaaagg agaaatacat cattatttaa aagcatcatc tttttttttt atattgtaag   60
ataaatacca ttctgatgta tttctcttgg aaagggatgc tggatatcctg ggaggtttat  120
gatttttgat gtttttactc aggtgattgg cttgtatagc tgaaatgctg atgaaaagga  180
gttttccctt ctcccttttt cttttctttt ctttntttt ttttttttga natggagtct  240
cgcactgttg caggggctgg tgtgcagtgg cacagtctcg gctcactgca acctccgcct  300
ctcgggttca agtgatgctc ctgcctcagc ctctgaata gctaggatta caggtgccca  360
ccaccacgcc cagctnattt tttgtatttt tagtaaagat ggggtttcac tatgttgggc  420

```

agtctggtct tgaactcctg acctggtgat cctcctgcct cagcctccca aagtgctggg 480
 attataggcg tgagccactg cgcccagcct gtcccttttt cttaaagtac ctttttggtg 540
 aggaccatta tnggtttgta ccaggataag gttgtaaagt tnatcataat atnctcttat 600
 atnaattcta aaaattgatg ttctaagaag anaggta 637

<210> 2847

<211> 801

<212> DNA

<213> Homo sapiens

<400> 2847

acaatgaatg gaggttaattg atttagtctg attccttcct gaaatctaaa tattagcaca 60
 atagtttctg aaattttaca atgttaaatt atgatctaata tcatgagaaa ccacgggttt 120
 aacataggga ttcaaaaaaa caaaaacaaa agaataggaa taaataaccc ttaattgtat 180
 attggactag ttcagccctt aaacagcttt acctttattt aggaatgtac attttaggta 240
 ttatcttgat catggagctt agatttaatt tagatagcaa aaataaagat ttgtatttct 300
 ttccaatag ctaaaagtta cataacacta atacttataa cctatcaata tcagatatta 360
 atgactttgt agtgttgtaa aattttgagg aattttggag tctttatcat aggnacctg 420
 gaccacagtt actattttatt gacaatgtga ttgagtgtat ggaggaaagc acagtggatg 480
 ctaggctttg taaatatggg gatgtagaaa agcagatagt tcagtgtcta cttttttcta 540
 gaactacctt gaaaccttaa attttaagtc atgttcattg ctagaaaatt aaatgtncct 600
 attaaaacca atgaaaaagc aatttctgaa atgaaattag anataatctt tgtgtcttat 660
 aaaaaagaca ttaataaaaa atctgaaagg ggcngggcgc catnggctca cgcctgttat 720
 ccccaacatt ttnggggaag cccaagggtg ggcggatcat cctaaggcca ggaattccaa 780
 aaacagncct gggncncca t 801

<210> 2848

<211> 506

<212> DNA

<213> Homo sapiens

<400> 2848

```

ggacgattaa caagaacaat agccaaggac cacaggacat ctcaactggt tcaaaattga 60
agttgagcaa gctttccact cgatgggtgc caaaaccgtt gtgccagat cagctgcaga 120
caagagcaga gctttcaatg gaaattttta acnagtggna tcnagaccct gaagcatttc 180
cttgaattat aacaggagat ggaacaggac tttaccagtn ccatacctgaa gacaaaccac 240
aatcnaagca atggctacca ngaggtagaa gtggcctagt caaggcnaat gtggacaagt 300
caaagtnagg tcatggcaac agtttcttgg gatgctcaat gcattttgct tgttgacttt 360
ctggaaggcc caagaacatt tttttttttt ttttgaaatg gagtctcgct ctgtcgccag 420
gctgggagtg nngtggccna tctcagctag cttgcnagc tctgcctccc aggttcacgc 480
cattncctg cctcagcctt ccgagt 506

```

<210> 2849

<211> 590

<212> DNA

<213> Homo sapiens

<400> 2849

```

gcagaccacg ttagaacctc ggctcctgga gtagcanaac ctcggcttca atgggaccct 60
catttcataa atgaagaaac tgagattcaa agaggggaac taccgaaggt tacagagcga 120
gttcgtggat ggggaaactg agcctcacat gnttgaattc cagcatataa gcaacagact 180
ccagatttgg acatgtatat cttattccag gcttcccaga tgaccaccaa ggtggaaggg 240
atgatgatgt ccaggcagaa gggagctagg ccggcccagg cttttcctct aggcacagcg 300
gactccaggt tcagccttcc cggatggtaa tgttgcatte tgaanagcta ctttcccgcc 360
aactcatctc tggacttctc tggggcccaa ctctggttct ctgcctgcag gaggtcccct 420
ctgacttccg acagtanatg acccttctga ctcacagttc tactgctggg aaatgcctcc 480
agagctgctg cccaccctct ctgcatccct ccaggtcact ggggtgttgaa tcangggaag 540
cagggatacn cncgggcggg aaactcaggt ctccataaat tcnancctc 590

```

<210> 2850

<211> 760

<212> DNA

<213> Homo sapiens

<400> 2850

```

ganagccgga cgttccggcc gcttcgggct ggcggtcgga gagcgctcgg gtcattgtctg   60
cccaggggga ctgcgagttc ctggtgcagc gagcccggga gttggtgccg caagacctgt   120
gggcagccaa ggcgtggctg atcacggccc gcagcctcta cccggcagac tttaacatcc   180
agtattgagat gtacaccatc gagcggaatg cagagcggac cgccaccgcc gggaggctgc   240
tgtacgacat gtttgtgaat ttccanacc agccggtggt gtggagagaa atcagcatta   300
ttacatcagc attaaggaac gattacagga caaacaacc cnatttttaa gaagtttatt   360
tgaaactctt cctggtcgag tccagtgtga aatgttacta aaggtcacgg aacaatgctt   420
caacacgtta gaaacgatca gaaatgttgc ttctactttt gaggcgcttc cctnaaacgg   480
tggtgcancn tggggttggc cttggggang cactattana agctgaaact attgaagaac   540
aagaatctcc agtgaactgc tttagaaaat tatttgtttg tgatgtcctt cctctnataa   600
ttaacaacca tgattttcga ttacctgccn atttattgta taaagttctt gaacaaagca   660
gcctgaattt tatatcaatt attgtcctag gtctactcca attagaaaat cncntccag   720
gcgcccagna atacatctga attttaattg ttcccctnnc                          760

```

<210> 2851

<211> 860

<212> DNA

<213> Homo sapiens

<400> 2851

```

ctctctctct ctctcctgct gcattgtgaa gaaactgctt gcttccctct caccctctgc   60
agtttccctga ggcctcccca gccatgcgga acgctgtana ccaagacctg gaattaacac   120

```

atcagaagat tctatgggga aaccatttta aaaataggat gcattttttt cttttctgca 180
 caggagagaaa gtttaagctc tcctcactat gagttttcaa gtataaaaga ctttttcttc 240
 cacgattttg agaacaactg aggactcttg tgaccaggac aacagggaag cttgcagcaa 300
 gatagctcca ggttggattc atgcttcgca cccaagggc tgccagccag agaggaggag 360
 aagcaatcac tcctgcagtt tctgaacact acacagacgc caggtnnctt cttcaggaga 420
 acagccctct gaggaggcag gaagaggagg cttatctttc agcagccgga gctgctgaga 480
 tctctgggca gattaagctc tctctaattg atgggctcca gcctggcaca ttcagtggag 540
 aggatccac tcatccatca tcaacatnat atggctctcc ctgcacttca cagtgtcctc 600
 ttgctattga aaangntttt ttgccttctc aagtttcttt gtcacagtct acanggaaga 660
 actcaggccg ccaccggcag aagttaatgc cagctcacgt tttatttctg actgcttaat 720
 ccttggcctc gatcctggct ccagctctgg ccttttgttt cccaaanggt tncctttggg 780
 aaaacttctt ttttcctatg ctgaaattta tngggaaggc aaaaattaat tcccttgata 840
 ancnaaacct ttaaacctcc 860

<210> 2852

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2852

ttaacagaaa gatggaaatt aagcctttgc aatttgaaat tatgattgac agacttgaaa 60
 aagccagttc taatcagctt gtaacacttc aagaagcaaa actgctgcta aacgaagatg 120
 attaccttat taaagctgta tatgactact gggtagagaaa acgtaaaaac tgcngggggc 180
 catccctcat tcctcagatn aaacaagaga aaagagatgg ctctaccaac aatgaccctt 240
 atgttgcctt tcggagaaga acagagaaaa tgcanactcg aaagaatcgt aagaatgatg 300
 aagcctctta tgaaaagatg ttgaaactga gacgagaatt tagtagagcc ntaacaattt 360
 tggaaatgat taagagaaga gagaaaacca aacgagaatt attgcactta acctagaag 420
 ttgtggagaa aagataccat ttgggagact atggtggtga aatccttaat gaagtttaaa 480
 tcnntagatc ngaaaaagag ttntttgcca ctcccgaac tcttcataat ggaaatcnc 540

cc

542

<210> 2853

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2853

```
gtcaagatgg cggctgcggc antggcggcg gcggcggcgg cggccgcggc tgcattcttt 60
caggtactgg agatggagag catggnagac ggccgccgcc ggctcggcag gactggccgc 120
cgaggtccga ggcagcggca cggctggactt cgggcctggg ccggggatct ctgcaatgga 180
ggcgagcggg ggcgatccgg gcccagaagc cgaggatttc gagtgcagct ctactgctc 240
agagctgtcc tggcggcaga acgagcagcg gcgccagggc ctcttctgcg acattaccct 300
gtgcttcggc ggggctggag gccgcgagtt ccggggccac cgctcggtag tggctgccgc 360
caccgantac ttcacgcccc tgctctcggg ccagttttcc gagtcccgct cgggacgggt 420
ggagatgcgc aagtggagct ccgagccggg gccgaaccc gacacagtgg aagccgtaat 480
cgantncatg tacaccgggc gcatccgcgt cagcacgggc agcgtgcacn aagtgcttgg 540
aattggccga caggttccta ctattcctt taaaanaatt tgtgganaat ttctcaagaa 600
aaaaacttcn tctctcaaat tgtgtngc 628
```

<210> 2854

<211> 816

<212> DNA

<213> Homo sapiens

<400> 2854

```
ttttaaaata aaaagagtgt ttttaaaatt cttaattctt taaaataacct ctagaaaagt 60
catatagtat gtctctaata gctaaaatga agtagcagtt gattcttcat atcttcttac 120
acacattaaa tgaacataa tatttttgtg agttttcttg tttaatggaa actatactgt 180
```


taattgcatt ttagaaagg tgaggaagat ggaaatgtat cagctgaagg tgactcagtt 240
gaggcaggaa gtaaggaagc ctttccctga gagaaagctt tggtttagctt ttgtgcgtgg 300
cttgattggt ccatgttatt gagggatgct tgagtaccat agagaaatcc ttcaacaacg 360
tgaagagaac ttttaagccaa ttatatacct naattaaaca ttgacaagaa tgtaattta 420
acagacaaat tttgtctgtt aatgttacag acaaaaactg ttagagaaag anaacacaat 480
tgggactttt tattttaaat tgacatactg taaattcttt tgtattgagc atataaatgc 540
aaccnaaccc agtngtttct aacagttaat ttatgcatgt tttgagtttc naatattaat 600
ttagtaattc cacaactact tgaatttctt tatcatgaat ctctgcattt ctgtgtcttt 660
cctgtgccta tcccctattg ttctcccaaa aacctaagtt ncntgaatat anttttctc 720
attgggtttt ccttgggttg gggatcattt atttttnaat atacccccct ggtccaatat 780
tcctaatat tccttgaaat ttncnctcn ttnat 816

<210> 2855

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2855

atatcagctt ccagtgtatt gcttggcacc gccaatcaac atgatagagg aaaagagcga 60
catagagact ctggatattc ctgagccacc acccaattct ggatatgaat gtcagcttcg 120
tttgcgcctt tccacaggca aagacctcaa gcttgtgggt cgcagcacag acacagtatt 180
ccacatgaag agacggttgc atgcagcaga gggagtggaa ccaggtagtc agcgggtggt 240
tttttctggc agacctctca ctgacaaaat gaagttcgaa gagctgaaga tcccaaagga 300
ctatgttgta caggttatag tgagccaacc tgtgcagaac ccaacaccag tggagaactg 360
aactgagccc tgttggccag ctcccacatc cctctgctcc tttttatggt tcttgttgc 420
atttctact ctgcggcgtg aaatctattt cactgctcta aattccctat gaatggattt 480
agttctgagg aattaccagt gaaaaattcc atctgtgatg gagaccaacn aaaattatta 540
aacacaaaga gccaggcttt ganactcatg ttattaccat ttctaatttg aaaggnngtt 600
tagaaataga ttaccattta ttttagaaca ctccacaact atgttatggc tatatttcag 660

tgacttggac tgtaaataa aacattgcat ccatgaagga cagccccag ccccttttg 720
aaatacngaa atttttttna naaaaatntn tcc 753

<210> 2856

<211> 649

<212> DNA

<213> Homo sapiens

<400> 2856

gttgaaggcg agagcttgct tggcccggtg cgcttctgtc ccaagaaccg gacggagagt 60
gagggcacga gggtcgctgt cgggggctgt cgtcttcac gtacacgtcg tcgtgaggag 120
cgcagtcagg actcttcccg caaccctcc ggctcccttt cgcacgcct cgaggcggcg 180
gcggccaccg agacagcagc gcaccttccc ccatcccttc cccttatccc ccagcccaa 240
agggcccggt ctgcgcccc ccccgcccg tccgcccgt acgccggcg catgtcggcg 300
caggcccaga tgcgcgcat gctggaccag ttgatgggca cctcccggga cgganataca 360
actcgtcaac gaatcaaatt cagtgatgac agagtatgca agagtcacct tctcaactgt 420
tgtcctcatg atgtccttc tggaactaga atggatcttg gagaatgtct gaaagtccat 480
gacctggctt taagagcgga ttatgaaatt gcatccaaag aacaagattt tttctttgaa 540
cttgatgcca tggatcatct gcantcattc attgcanatt gtgatcgtn aacagaaagt 600
ggccnanaaa agattagcag aaactccaga agaaattaat gctgaaatt 649

<210> 2857

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2857

cccagccta tctcgcgtc gtgtgcaggc ccggctcggc tcciggtccc cgggtcgagg 60
gttaacgca gggccggcc tcggtcccg gactaagccg tgacccggg tgccatnaag 120

cangagggct cggcgcggcg ccgcggcgcg gacaangcga aaccgccgcc cggcggagga 180
 gaacaagaac cccaccgcc gccggcccc caggatgtgg agatgaaaga ggaggcagcg 240
 acnggtggcg ggtcnacggg ggaagcanac ggcaagacng cggcggggtc ggctgaacac 300
 tcccatcgag agctggacac attcaccttg ganggactca aggagcacgt gaaacagcta 360
 naaaaagcgg tttcaggcaa agaaccnaca ttcgtgctgc gggccctgcg gatnctncct 420
 tccacatcac gccgcctcaa ccactatggt ctgtataang ctgtgcangg cttcttctact 480
 tcaaataatg ccactcgana ctttttgctc cccttccttg gaacagccat ggacacanaa 540
 gctgatttac anttccgtcc ccgcncggga aaanctgcgt ca 582

<210> 2858

<211> 464

<212> DNA

<213> Homo sapiens

<400> 2858

acactgggct ccggcggcca gagtggggga ctaggtnaag cggcgccggg ccggggctgg 60
 ccgggaccag gcccagggt gagcggcggc gacagcgggt gccgggaggg ggganganag 120
 gcgcagccag aggagccgcc gcagtagctc cccgcctcc cgggctgagg gcggaaagaa 180
 aacatgcata tatgattttc ttctgatgaa acctaattgn ttcaagaaaa agaattctgc 240
 tttttggaag gatggaaaaa ttgggaataa tttttcccc ttgataatt agaccactca 300
 gtactgttgc ttagtttttg gttcagttac tttgatgtgg ttacaanaag aattttggct 360
 gtaatggatt tcatacattt ttaatgtcta atttaatagg gatatanaca gttggtttaa 420
 accaacattt ttggacgaag anangctatg gaaatnaana aaga 464

<210> 2859

<211> 478

<212> DNA

<213> Homo sapiens

<400> 2859

anagagctac cagctgccct gttggcttcg ctggtcggat cgtccctcctg gccccgccaa 60
acaggcgggg ggagcggccc cgactgtggg gccatggcag tagtctcctc gttctccgcc 120
gccgctagcc tatctgagtc gccggcttct gcgctagggg ctcccaccgc ctccgcaggc 180
taaggagccg ctgccaccaa cgagctgtga gggttactat gctccctctt tgccgccgtc 240
tcctcctctt gcccgcgcag gcacccctct ggctgctcag tcctgcctca gtgtcaaacc 300
agaagagaag taaaattcaa caaaaattta tgtgtggagt tccttcttaa aagaagaaaa 360
aagtgattat ttagactatg gatcggagca aacggaattc aattgcagga tttcctccac 420
gtgtggagcg tcttgaanan tttgaaggan gtgggtggang agaangaaat gtgagcca 478

<210> 2860

<211> 762

<212> DNA

<213> Homo sapiens

<400> 2860

ggaaaaatgt gtgcaaagaa atgatggccc ctgaggacag actctgggcg atcacagtca 60
cctgtgaagg ttttatnaag atgaaatctg atgaaaatgc aagccttcag caaaccataa 120
aacctgtat caaggttaga gagaaggaaa agccttcctt actgaagctc tttcgggaca 180
acacggccat tccaacctct agtgactcta cgtaggtgta aacttttttg tgggcattca 240
aagaaacact cagcatcctt cccataaata tatttattaa cttctacaag caatctaatt 300
tccttaatta caagcctaatt ttaatttccc ttttaagcctt tttgttaatt ttctttggan 360
atttttcacg tctttcattt atttatttgg agacagagtc tcgctctttt tcatgtcttt 420
aattaattaa ttaatttatt ttgagacgga gtcttactg tgtcactcan gctggantgc 480
agtggcgcaa tcacggctca ctgcaacctc tgccctccan gtccaagtga ttcttctgcc 540
tcagcctctc angtnctgg aattacaggc atgtgccacc acgccccgt aaattttgta 600
tattttttan tagaaacagg gtttcacat attggccagg ctggtctcaa actcctgac 660
tcaggtgatc ccctgcccc gacctcctga aattgttggg attacaggca tgaaccacc 720
ggngccccga ncttcttggt nttttnaaaa anttggccca aa 762

<210> 2861

<211> 690

<212> DNA

<213> Homo sapiens

<400> 2861

```
atctaagag gagcgaggtag cggtgcccc gaagcgctcg cttcccgcgg tgcgatctan 60
tcctgcagta ggcgggcccg ggccacaccg cggccgccca agccagtgcagg aggcccagg 120
gcctgacatc gctcccagcg ctgangacc gaggcctgct gtggangaca ccgtgctccc 180
tcgggacctg ctctggattc cggcccggac gtccccttgg agctctgcat ctccaacctg 240
gaacccaacc cagaagtctc aagtttgacg catcacgtgg cgtgcggatc cactgagggt 300
ccacagagag gggcgcccat ctctgcgtc tcagttatcc tgggtgttggg aattctgtgc 360
cctaaagaat tccgactcac atccgaacgg ggatctgggtg gaatcnaggg tgaaagacca 420
gagggacaat gttctactat cccaacgtgc ttcagcgcca caccggctgc ttgtccacca 480
tctggctggc ggcgactcgc ggcagccggg ttgggtgaaac gcgaatacct gaaggtgaat 540
gtggtgaaaa cctgcgaaga aatcctcant tacgtgctgg tacgaatngc aaccccgcag 600
cccggccttg ccgcgggccc gttctccct ctatctctca ncccaacttc anatctgtgt 660
gatccgcgtc tnttctccac caatgccntt 690
```

<210> 2862

<211> 751

<212> DNA

<213> Homo sapiens

<400> 2862

```
gtacgccgat tccatatggg cgccggcgcg gagcgccgag gggcagcgcg gggtcgccat 60
ggctgagctg cagcagctcc ggggtgcagga ggcgatggag tccatgggtga agagtctgga 120
aagagagaac atccggaaga tgcagggtct catgttccgg tgcagcgcca gctgttgtga 180
```

ggacagccag gcctccatga agcagggtgca ccagtgcacg gagcgctgcc atgtgcctct 240
 ggctcaagcc caggctttgg tcaccagtga gctggagaag ttccaggacc gcctggccccg 300
 gtgcaccatg cattgcaatg acaaagccaa agattcaata gatgctggga gtaaggagct 360
 tcagggtgaag cagcagctgg acagtttgtg gaccaagtgt gtggatgacc acatgcacct 420
 catcccaact atgaccaaga agatgaagga agctctctta tcaattggaa aataaaagta 480
 ttgcccagtg gccatcaggc tgaaggcaag aatatatatt ttataaggga attgggaatt 540
 ttagtctttt aagccnagtt tacgaatgaa naaatgaagg atggccccna gcgtaaggca 600
 tatgtccttg ccnctggaca ctggttatatt atgtttcagt ccctaaaaaa atgaaatgga 660
 aaaaaagtgg tgctnaaatc caantcaaaa atattaacng ggaaaatttt taaaanctta 720
 ttantttccc tgtgggccag ttgctttgtt c 751

<210> 2863

<211> 823

<212> DNA

<213> Homo sapiens

<400> 2863

actgcaggct ggggctccgc tccccggcgg gagcccgcg gtggttccca gcgaagtccc 60
 cgcgcggtg gggccagcgt gagtattctc cgcccgctgt cctccccctg gaggcggcag 120
 cgcccgttta ttgaggctt ctaatgtgag gaaaaacacg gaatgacaag tgtgggaaag 180
 agcaagcact aaattactgt cagaaaaata aacggagtan cacagtgtg ctcggtgatt 240
 tacgggggca attagtcacc accccacggc gctgctgagg acagcacggc agcagacaag 300
 tcaggcccgt gaggaagaaa agctttgcac tgctctccag acaacttttc aaacaacaag 360
 agaggatatt tgagcacatt aggttttgtg tcttcattct gggtacctac tcttcatt 420
 attctaccaa cttatacat aaacatattt ttagcacaat atgaacctgt tctatgtgtg 480
 tttaaaagcc tccagcagca acttttttct ctcccactgt ccaaaagttn ggttttcccc 540
 ntcccttaaa aaacaaaaca aaaaaacctt tcttcactcc aaattgtccc ctggtgtgtg 600
 gtttttgtct ttctcattac ttcttgcatc ttgctacatg ttctgcattt gctcaaaacc 660
 cctgggttgc taaggaattt gggctctgctg ctctctggg gaaaatttgg taanctgggt 720

acaaggaagt ttaatnaaca aaggctaaaa tgaaaatcat acattaactt cccattatt 780
ttgtnaacat tttctttaac ataccaaaca nantttccaa tnt 823

<210> 2864

<211> 727

<212> DNA

<213> Homo sapiens

<400> 2864

gggantccgc gagcgtcgtc ggcaagcggc cgcctttcca cggctactccg agcactatgt 60
cgtccccggc gtcgaccccg agccgccgcg gcagccggcg tggaagggcc acccccggcc 120
agacgcctcg gagtgaggat gccaggtcat ctccctctca gagacgtaga ggcgaggatt 180
ccacctccac ggggggagttg cagccgatgc cnacctcgcc tggagtggac ctgcagagcc 240
ctgctgcgca ggacgtgctg tttccagcc ctccccaat gcattcttca gctatccctc 300
ttgactttga tgtagttca ccactgacat acggcactcc cagctctcgg gtagagggaa 360
ccccaagaag tgggtgtagg ggcacacctg tgagacagaa gcctgacctg ggctctgcac 420
agaanggcct gcaagtggat ctgcagtctg acggggcagc ancanaanat atagtggcaa 480
gtgagcagtc tctaggccaa aaacttgtag tctggggaac anatgtaaat gtggcagcat 540
gcaaagaaaa ctttcagan atttcttcac cgttttattg acccctctgg ctaaagaana 600
anaaaatgtt ggcatagata ttactgaacc tctatactg caacgacttg ggganattaa 660
tgttatttgt ganccatttt ttaaattgtg aacttgtaga nccccttcna nttcattttg 720
acaaaaa 727

<210> 2865

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2865

attttattac agttggtatg gaaatccaca atttgatggt aaatatatac attggaatca 60
 tccagtgtta gagcattggg accctagaat agccaagaat tatccacaag ggagacacaa 120
 ccctccagat gacattggct ccagctttta tcctgaattg ggaagttaca gttctcggga 180
 tccttctgtc atagaaactc acatgagaca aatgcgctca gcttcaattg gtgtactagc 240
 cctctcttgg taccacactg atgtaaatga atgaaaatgg aagaacctac tgataacttg 300
 ggtaccnct atttgggaat aaagctcata aantatancc tgaaaggt 348

<210> 2866

<211> 732

<212> DNA

<213> Homo sapiens

<400> 2866

tcgagtcggc aatatacagc ttctgtatth atcaggccca gttctggtga tgatttcact 60
 tttgacagaa gctgtccctc aaaagcaaac atgcaatana agaaacagat ctcaatggag 120
 tctcactctg tcaccagga tggagtagag tggcgtgatc tcggctcact gcaagctccg 180
 cctcctgggt tcatgccatt ctctgcctt agcctccga gtagctggga ctacaggcgc 240
 ctgccaccac gcccggctaa tttttgtatt tttagtagag acagggtttc accgcattag 300
 ccaggatggt ctgatctcc tgacctcgtg atccgccgc ctcagcctcc caaagtgctg 360
 ggattacagg cgtgagtcac tgtgccacgc caagtttagt attttttgta gagacagagt 420
 ttcaccatgt tggccaggct ggtcttgac tcattggcctc aagtgatcca cctgcctcgg 480
 cctccgaaag tgccgggat tacaggcgta agccactgtg cctggcctta aatgggtaaa 540
 tttcatatgg tatatgaatt atatttcact aaaactttaa gaaaacatta tacagtactg 600
 ttcaaatttt aagtggcca atttaaatgc actattggta tacaantcta tgtaaatgtc 660
 cntaccaggg tatatgttaa ctataaatat ctatgccct acccttnant atccaancat 720
 atattatatg cc 732

<210> 2867

<211> 678

<212> DNA

<213> Homo sapiens

<400> 2867

```

tgacctgagg aagaagagca agtaatacat gaagatgatg aaagaccttc tgagaaaaat   60
gaatttttcta gacgaaaacg ttctaaatca gaagacatgg acaatgtaca gtctaaacgt  120
cgtcgatata tggaagaaga atatgaggca gaatttcaag taaagattac agccaaagga  180
gacattaacc agaaacttca aaagggttata cagtgggtgc tggaagaaaa attgtgtgcg  240
ctgcagtgtg ctgtatttga taagactttg gcagaattga aaacacgagt ggaaaagatt  300
gaatgtaaca agaggcataa aacagttctc actgaactac aggccaagat agccaggtta  360
accaaacgct ttgaagcagc caaagaaggt ctaagaaaa gacatgaaca tccaccaac   420
ccaccagtat caccaggaaa aactgtaaat gatgtcnaca gcaataatna catgtcttac  480
agaaatgcag gcacagtgag acagatgctg gagtccaaaa gaaatgtnag cgagagtgcg  540
ccacnctcct ttcaaactcc tgtgaatata gtatcttcaa ccaatcttgt cnetcctcca  600
gcagttgtca gtagtcaacc taaattgcnn actccagtga cttcgggttc cctccacngc  660
aacgtcngtt cttcctgc                                     678

```

<210> 2868

<211> 703

<212> DNA

<213> Homo sapiens

<400> 2868

```

atgctgggcg gcgtcagggtg agcgggtggc gctgggcctc aggtaaccat ggagaaagag   60
ctgcggagca ccattctttt caatgcctac aaaaaggaga tatttaccac caacaatggc  120
tacaaatcca tgcagaaaaa acttcggagt aattggaaga ttcagagctt aaaagatgaa  180
atcacatctg agaagttaaa tggagtataa ctgtggatta cagctgggcc aagggaataa  240
tttactgcag ctgagtttga aatcctgaag aaatatcttg aacttggtgg agatgtcttt  300
gtgatgctag gagaagggtg agaatccaga ttgacacca atattaactt tttactagaa  360

```

gaatatggaa tcatggttaa taatgatgct gtggttagaa atgtatatca caaatatttc 420
 catcctaaag aagctctagt ttccagtga gtcttgaaca gggaaattag ccgagctgca 480
 ggaaaggctg tgcctgggat cattgatgan gaaagcagt gaaacaatgc ccaggctctc 540
 accttttgt atccttttgg tgccacattg agtgtcatga aaccagcagt ggcggttctg 600
 tctacaggtt ctgtcngctt cccacttaa cagaccatt ttgggcttcc taccactcaa 660
 aaaancnagg tggggaaact gggccgtgct nggttcatgt ccn 703

<210> 2869

<211> 816

<212> DNA

<213> Homo sapiens

<400> 2869

gtggctgctg cggatgtcgg tgtgagcgag cggcgctga acacacggcg gctgccgagc 60
 gcctgacccg ggcctgcgcc agagcctgca ccgagctccg gggccccaca cccgctacgg 120
 tggccctgcg cccgttgcta ctgaggcggc gtgctctgca ttcttcgctg tccaggcctg 180
 ccggctctgg tgtctgctgg ctccctcctg ctgcctgct cctcctgct tgcctgagtc 240
 accgccgccg ccgccgccac agccatggcc gagagtgggtg aaagcggcgg tcctccgggc 300
 tcccaagata gcgccgccg agccgaangt gctggcgccc ccgcggccgc tgcctccgcg 360
 gancccaaaa tcnnгааagt caccgtgaag accccgaagg aaaagganga attcgccgtg 420
 cccgaaaata actccgtcca gcantttaag gaagaaatct ctaaacgttt taaatcnent 480
 actgaccaac ttntgttgat atttgctgga caaatcttga aagatcaaga taccttgagt 540
 cagcatggga attcatgat agacttactg ttcaccttgt cattaaaacn cnaaacangg 600
 cctcaggatc nttcagctca gcaaacaat acagctggaa gccatgttac tacatcatca 660
 actcctaata gtaactctac atctggttct gctaactagc aacccttttt gggtttaagt 720
 tggccttggg ggggaatttg caaggtctga attancnngg ggttngaaa tactaaccn 780
 ncttcctctg aaatttccga atcccgaatg ccggcg 816

<210> 2870

<211> 717

<212> DNA

<213> Homo sapiens

<400> 2870

```

gaggaaataa ttaagcttat taaagacaaa aganaggatg ttagttttcg aaacattggc   60
ataataactc attacaaggc ccagaagacg atgattcaga aggatttgga caaagagttc  120
gatagaaaag gaccagcaga agtagacact gtggatgcat tccagggtcg gcagaaggat  180
tgtgttattg ttacgtgtgt cagagcaaat agcatccaag gttcaattgg attcctggca  240
agtttgcaga gattgaatgt caccatcaca cgagccaagt acagcctctt catcctcgga  300
catttgagga ccctgatgga aaaccagcat tggaatcagc tgattcagga tgctcagaag  360
cgtggtgcc a ttattaagac ctgtgacaaa aactatagac atgatgcagt gaagattctg  420
aaactcaagc ctgtgctgca ganaagtctc actcaccctc ctaccatagc cccagagggg  480
tccagacccc aggggtggtt gccagcagc aagctagaca gtggatttgc caagacatct  540
gttgctgctt ctctatacca cacaccctct gactccaagg gaaattactc ttactgttac  600
ttcnaaggga ccctgaaaga actcctgttc atgaccnact tccnggaacc ncgaatgctg  660
aaaaagatng ggctttgaag tccaaggaag aatttccttt tggggatccn caacccc   717

```

<210> 2871

<211> 552

<212> DNA

<213> Homo sapiens

<400> 2871

```

tctaaaaatg cntcctgaag gttcccta at ttctaaatct gggaaaccac ttccgaacca   60
gctactttta aatttctcag actggctggg ggaaaataga aacttagcca ctctaactg  120
gtagatggag gcgtgaactg tnataaccct nagatgggta tacagaattt ttctcccna  180
gtagcagtca cattgcaaaa agattatatt gctattgaat ttttaagggtg agattaaatg  240
tctgtnatat gtgcataatc ttccattcct gggatcttag tcttgacatt ttcttttta  300

```

gcatanaaca cccctccttt acaaagaang tnatctgtgg aaggaaagac atgctaatat 360
gatggtttta attataattc cctcagaacg gaatatatcc attaagtaca tggcatatat 420
atggctatag aaactgctac ntgtatttaa tttattgcct taattttttt ttatctctct 480
cnggatagac cntttagaaa ctatccagca actcctaact gcagtingtaa agaanatcca 540
ttaatcactg cn 552

<210> 2872

<211> 760

<212> DNA

<213> Homo sapiens

<400> 2872

ctgttccaaa ccacgtggac gcgtctgggc tgctggaggc agcccagacc gccgccgtcg 60
gtgtcgccgc caccaccacc atcggagtca cgagtccgc gtctgtccga agtcgccgct 120
ctcgggctgc tcacgtctct tcggagagcg cgcacatggc gactcaggcg tactccctca 180
gctacgcagg gtgcaacttc ttgcgccaac gtctggctct gtctaccctg agcgggcgcc 240
ccgtcaaaat ccgaaagatt cgggccagag acgacaaccc gggcctccga nattttgaag 300
ccagcttcat aaggctattg gacaaaataa cgaatggttc tcgaattgaa ataaaccaa 360
caggaacaac cttatattat cagcctggcc tcctgtatgg tggatctgtg gaacatgact 420
gtagcgctct tcgtggcatt ggggtattacc tggagagtct tctttgcttg gctccattta 480
tgaagcaccg gttaaaaata gttctacgaa gaggtagcaa tgatcagggt gacccttcag 540
ttgatgttct taangcaaca gcaactccct tgttgaaaca atttgggatt gatggtgaat 600
catttgaaac tgaatattgt ggcgaanggg aatgcctccc ggaaagaaga agcgaaatgg 660
ttttctcatg tctgttaagg aangtcttga aanccattc cactcccaga ttcangaaaa 720
aatccaacgt tttaaaaaga aanggcgttc ccngttacgt 760

<210> 2873

<211> 896

<212> DNA

<213> Homo sapiens

<400> 2873

```

attaatatgt gctcatatct tactcaacat cagagagtct gtacttaata aaaccattat 60
agatgcaact agtgtcaaaa gatctttcag aaaataaaag cctttaaagt gaagaagata 120
attcattctg aagacaaaca ttacaaatat taagagggtt gtagtaccat tacttgcac 180
acagatctta ttgtacacat tttgtactaa agaaaaccct gaagcagttg ctcaaatact 240
gttcaacatc agaaaattta tattggaaaa aacccttgga aaatgtaata aatttgtaaa 300
aacagttttg aaaaactaca gcttataaaa catgagggtc tataatgctt ggttgatagt 360
acaaagttaa ttcnacatca gggaatttat attggagaaa aaccctacaa atgtnatcag 420
tttgaaaaaa catttttaaa aaaaccacag catagaaaac accacagggt tcatactaaa 480
atatgttttt gcagatgcag taaaaatgaa aaaaatttaa tccgaaatta agtttatgta 540
aatatctgan aattcacagt agaaatatct aaggcgcgga cacttcagac attacactaa 600
atcagtgcta agtncagaaa acaacncaa ataaaacttg gtggataaat tatttgtnta 660
tnacattaaa agaagtagaa gattttcagt tataattacc attaaaagtt tacttttate 720
ttgaaaaaaa ttactgaatt tttaaattaa gtggaataat gatgttattt aaactcccca 780
aataactttt atgctccttt tttccattcc cggctaatan ttcncatgt tgaaaagcat 840
gttgaaccaa ttgntggctg gccccnnaag aatttgaaaa aaattccttt ttattt 896

```

<210> 2874

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2874

```

acacgccg cgctgaggcccc cgggcccgtc atggaggcgc ccaccgtggg agacgcccc 60
ccgacccctc gcccccttcg gccccggccc ctgccctggt tccgttgccg gccccggatg 120
tggcgcggtt gcgcgaggag caggaaaagg aagaaggtag ataatgacta taatgccctt 180
cgagaaagac tcagcacctt gcctgataaa ttgtcttata atataatggt accatttggc 240

```

ccttttgcct tcatgccagg aaaacttgtc cataactaatg aagtctctgt tttactgggg 300
gacaactggg ttgcaaagtg ctcaacaaag caggctgtan gtttagttga gcaccggaaa 360
gaacatgtta gaaaaacaat agatgactta aaaaaagtga tgaaaaattt tgaatccaga 420
gttgaattca cagaagattt gcagaaaaatg aacgatgctg caggtgatat tgttgacata 480
cganaagaaa ttaaagtgtg cttcgaattt aaagcnaaac accgaattgc tcataaaccg 540
cattccnaac caaaaacttc 560

<210> 2875

<211> 602

<212> DNA

<213> Homo sapiens

<400> 2875

tttttatgtc ggaatatgaa gcaacaaatt tattgatccg agctctgtgt cacttttatg 60
atcaagatga ggaggaaggt ctccaatctg atgggtgtat tgatgatgca tttgccttgt 120
ggctacagga ctcaacacag acattgcaat gtattacaga actgttcagc cattttcagc 180
gttgtacagc cagtgaagaa acagaccatt cagatctctt gggaaccctg cacaatcttt 240
atttgattac ttttaatcct gtgggaagat cagctgttgg ccatgttttt agtctggaga 300
aaaatctcca aagtcttatt actctaattg agtactattc caaagaagcc ttgggtgatt 360
ccaaatctaa gaagtcngta gcttataatt acgcatgcat acttattttg gtgggtggtc 420
antcttccag tgatgttcaa atgctagaac aacatgcagc atctctcttg aagctttgta 480
aagcagatga aaataatgct aaattgcaag aacttggcna gtggcttgaa cctctgaaaa 540
accttagatt tgaaattaac tgcaccccaa acttaattga gtttgtaag canaatatcn 600
at 602

<210> 2876

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2876

```

gggggctgct gggaaggccg gcgggatgga ggcggcggga ccggctcgcg ggtgcgggtc   60
cgggtgaagc gggaggcagc cagagtcgga gccgggcccg agcaccaggc gcaggcccgg   120
cgcccgcctg cccgcaccct cgtcctcaca gacgccacag ccatggccat gatggtgtnt   180
ccgcgggagg agaagctgan ccaagatgan atcgtgctgg gcaccaaggc tgtcatccag   240
gggactggag actctgcgtg gggagcatcg tgccctgctg gctcctctgg ttgcacctga   300
ggccggcgaa acctagcctg gctcgcagga tcgctgcatc ctcctgcgtc gctccctgga   360
atccattgag cttgggctgg gggaggccca ngtgatcttg gcattgtcga accacctggg   420
ggctgtagaa tccgagaaac anaagctgcg ggcgcacgtt cggcgtctgg tgcaagaaaa   480
ccantggct                                     489

```

<210> 2877

<211> 826

<212> DNA

<213> Homo sapiens

<400> 2877

```

attaaatgat tataaactaa ggaaaaggaa gacttttgaa gataatataa gaaaaaacag   60
gactgtgatt agtaactgga taaaatacgc acaatgggaa gaaagcctaa aggagattca   120
aagggtcga tccatatacg agcgtgcttt agatgtagac taccgaaata ttacactctg   180
gctgaaatac gcagaaatgg aaatgaagaa tcgccaagtc aacctgctc gaaatatctg   240
ggaccgggcc ataacaacgc tgcctcgagt taatcagttc tggtaacaagt acacgtacat   300
ggaggaaatg ttgggaaacg ttgccggtgc ccggcaggtg tttgagcgtt ggatggagtg   360
gcagcctgag gagcaagcct ggcactccta catcaacttt gagctgagat acaaagangt   420
ggatcgggcc cgcaccattt atgagcgatt tgcctcgtg caccctgatg ttaagaactg   480
gatcaagtat gcccgtttg aaaaaaaca tgcttatttt gcccatgcac ggaaagtgtg   540
tgagaganc t gtggaattct ttggagatga acatatggat gagcnccttt atgttgcctt   600
tgccaagttt gaanaaaatc agaaanaatt tgaaagggtt acgantgatt tacaagtttg   660

```

ccctggacng aatttccaaa ccagatgccc cagaaacctt ttaaaattat tcccctcctt 720
 tgaaaaaaaa tttnggtgaa tnggcggggg tttttaaaaa tttctttgtn aagccaaacc 780
 ggaaaattcc ccgtttccaa aanaaaaaaa ntttaaaggg cgaaat 826

<210> 2878

<211> 662

<212> DNA

<213> Homo sapiens

<400> 2878

gtgacttcgg gctgtgggct cgctcgcggc tcttcggcca tggttttctc aaacaatgat 60
 gaaggcctta ttaacaaaaa gttacccaaa gaacttctgt taagaatatt ttccttcttg 120
 gatatagtaa ctttgtgccg atgtgcacag atttccaagg cttggaacat cttagccctg 180
 gatggaagca actggcaaag aatanatctt tttaactttc aaacagatgt agagggtcga 240
 gtggtggaaa atatctcgaa gcgatgcggt ggattcctga anaagctcag cttgcgaggc 300
 tgcattgggtg ttggggattc ctccttgaag acctttgcac agaactgccg aaacattgaa 360
 catttgaacc tcaatggatg cacaaaaatc actgacagca cgtgttatag ccttagcaga 420
 ttctgttcca agctgaaaca tctggatctg acctcctgtg tgtctattac aaacagctcc 480
 ttgaaaggga tcagtgaggg ctgccgaaac ctggantacc tgaacctctc ttggtgtgat 540
 cagatcacga aggatggcnt ccaagcactg gtgcgangtt gtccaagcct gaaanccctg 600
 ctctgaagg gctgcccnca gttingaaaat gaagctctga aacacattca aattactgcc 660
 nt 662

<210> 2879

<211> 557

<212> DNA

<213> Homo sapiens

<400> 2879

aatttagggt tggggtacaa tttgtttcta ttaagcaagt accagtttac caatacatgg 60
 antaactgaa gtgtaactgt taaatgcttg tatactantt tttctttctg attgtcagtg 120
 atttataagc tataaatgac caaggtcctc agactgcttt tagcatctgc aacttaaaaa 180
 aatgggagtt agaaaaagaa caaatgctaa atagagtaac agttaaatgt atgtgtacac 240
 tcttcccaaa tgccaanagt gcagcgggtg ggtgagatnc anatattcat ttatttctaa 300
 gtctgtagtt aacatttatg ttccctactc cctacgtaag ccagactttg gcaacagtga 360
 tagttgattc caggcttatt tgacttaaag tcactgaant ggaaactaag aantggcagt 420
 tagtgtttta cccagcattt ctgccttctc tcttttcttc atgtgttttt gtctctagcc 480
 tatgtgtatt tgtgtaaaat aatgtgggat accngaana tanatttaaa aggaccaant 540
 ggtnaaattg ggcccaa 557

<210> 2880

<211> 700

<212> DNA

<213> Homo sapiens

<400> 2880

atgaatgaac acttatcaag cctaattaaa aaaaaacgtn aatgtatgca gcccaaagat 60
 ttttaatttta aaacaccaga aaatgataag agatttcaga agaaatttga gaaaatggct 120
 aaagagctac aaaggcaaaa aacaaatcta gatgatgatg tacctattct cttatttgaa 180
 tctaattggtt cattaatata tactcccaca attgaaatta atagtagtca ccacagcgca 240
 atggagaaga gattacaaga gatgaaggag aaaagggaaa atctttcccc cacctcttcc 300
 caaatgattc agcagttctc tgataatcca agtaactctc tgtgtgaagc acctttgaac 360
 atttcacgtg atactttgtg ttcagatgaa tactttgctg gtggcttaca ctcatttttt 420
 gatgatcttt gtggaaactc aggatgtgga aatcaggaaa ggaagttgga aggatccatt 480
 aatgacatta aaagtgatgt gtgtatttct tcacttgtat tgaaagcaaa taatattcat 540
 tcattcccat ctttactca cctcgataaa tcaagtcctc agaaatttct gagtaattct 600
 tcaanggaag aaataaactt gcnaagaaat attgcgggtt aagtaatccc cctcaccaaa 660
 aaccagctgg canggtntgt ctcnggaaa cgttttgaaa 700

<210> 2881

<211> 640

<212> DNA

<213> Homo sapiens

<400> 2881

```

aagaagatgc ctggagcagg cagcatcctc aaatggaagg taattgccct caaatcactt   60
aactaggatg acctactttg ctttcctgta tagccaggtc tgttatcana cccttatctt  120
gggaggcatc gtgccagagc ctggggcaag aaagggtgc tatccaggaa tgcaggtgaa  180
attatagcta ttagccctgt cttagagtgt gaggaaaatg tgcccccta cccctggcta  240
agtttgggtt cccatgtcat aaactgcctc cctctctgat agctctgcat aaacatccca  300
ggaactcaaa gtaacatttg atttcccaaa gagaacattt gcatttgtaa ctgtcagaaa  360
taggagagat catcaaagct aaatgaattg ggctataaac agtttgaaat atgtctttaa  420
attttaaaaa acatattttt tgtttgtttt ggggagagan gatcatttan actcaacaac  480
aaaacagaaa actgtgagtg ccattttgag acaagaccta cctggtcctt cccctcata  540
ctttctgcta ccccgtagcc tccctctctc cttccagtca cagattatcc gcttggtttt  600
gganttttaa atgtgtggtc ctgaanaggg anaagaaaac                          640

```

<210> 2882

<211> 696

<212> DNA

<213> Homo sapiens

<400> 2882

```

cagttatatt ctactctgaa agaaggcaac ccaccctggg aggtgacaga agcggttctc   60
tttatcatgg ctgctatagc aaagagtgtt gatccggaac acaatccaac acttgttgaa  120
gtcctagaag gagttgtccg cctcccggag accgtacata cggtgtgctg ttacaccagc  180
attgaattgg ttggagagat gagtgaagtc gttgatcgaa atcctcagtt ccttgaccct  240

```

gtgttgggct atttgatgaa aggcctgtgt gaaaagcccc tggcttctgc tgcagccaaa 300
gccattcata acatttgctc tgtctgccga gatcacatgg ctcagcactt taatggactc 360
ctggagattg cccgctccct cgattccttc ctgttgtctc cagaagctgc tgtgggcttg 420
ctaaaaggga cagcacttgt cctagcccga ttacctttgg ataagattac cgaatgtctt 480
agtgaactat gttctgttca ggttatggca ttgaaaaagc tgttgtctca agancccagc 540
aatggcatat cctcagatcc cacagtgttc ttagatcgcc ttgcagtgat atttaggcat 600
accaatccca ttgtggaaaa tggacagact catccgtgtc agaaagtcnt acaggaaata 660
tggccngttt tatccgagac tctnaattan cncgga 696

<210> 2883

<211> 625

<212> DNA

<213> Homo sapiens

<400> 2883

tagacatgcc cagagttatg attacaaatt taggaggtag acggctcagg aattccctgg 60
gattgttgtg ctggtggaat ggcagaggga acttcacagg aaccttagtg ctcttttacc 120
tcaaagccac agacaggaaa tagaaagtgg aaaagtaata tctccttttc tttccataa 180
ggagtttcaa cactgaactt taaaaagtct atcatattcc agcaatattt tttctttgtc 240
ctttatgttg taagtttgtt ggaaaaacta cttcggttaag aaatgttact gagataacaa 300
caactggcta atactgcatg tagattgctt aggttttaaa gtgactgcct gacttcacat 360
gttattgcta cagcctccag tatgttcgca ttatctcaaa ctcagggacc ccacaggaca 420
ggagacaccc tttctgaaac tganttggaa gtgaaagggt ggtgatggtt ttggccaanc 480
ctgcgggang gaaagtattg tattggganc acccttggga ccaggaagaa ggatgcccag 540
gttcacactc tgggaccctt aanacattgt cantgggtaa ggtggaaggn cactgccana 600
agctgctgcc antgcctctg gggaa 625

<210> 2884

<211> 556

<212> DNA

<213> Homo sapiens

<400> 2884

```

tagatgctgc taactgttcc tcggctgac gttttgtgac ctttctgctg cctacaatcc 60
ttgatcaact tcagttcaca gaacnaaatc tagattaggc tttacaaga aaaaaatgtg 120
aaaggattgc cnaggccatt gaagttttgt taactctctg tggagatgat aactaaaaa 180
tgcattattgc aaaaatcttg acnactgtca agtgtncac tcttatagaa cnacaattta 240
catatggcaa gattgacctg ggatttggaa caaagggtgc anattctgaa ttatgcaaac 300
ttgctgctga tgttttttga aaactcttga tttgattaac aaacttaaac cattggttcc 360
tggtatggaa gtaagcttct actaaatact tcacgacca cgtntgatta ctcctttggc 420
ttttgcttta acgtccgata atagagaaca agtacagtct ggactgagaa tattattgga 480
ggctgctcca ctgccagatt ttcctgcttt ngacttggg agaaagtata gcancanaca 540
atgcctattn acgacn 556

```

<210> 2885

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2885

```

gtgctgggcc gcgggccgaa agatcgccag ggctgcgtat gcttgtggcg cgcccgcgga 60
gaggccgggg ctctgacgcc cgctctgcgg cttcggtgtt tgaacaggcc acagtccagg 120
agcgcttaca ttcaggagct ccgcgtagca cctgcccac caaactcagc cctccgttaa 180
gatcctggtt ccatgccgca gtaagacagc aggcccaagt ctgcacatcc cagtgatgca 240
ccatgccaat agtggataag ttgaaggagg ccctgaaacc cggccgcaag gactcggctg 300
atgatggaga actggggaag cttcttgcct cctctgcaa gaaggctcct ttacagaaaa 360
tcganttcga gccagccagc aagaacttct cctaccagct ggaggcctta aagaacaaat 420
atgtgttgct cnaccccaaa acagagggag ctagtcgcca caagaatgga gatgaccccc 480

```

cngccangag acgggcagtg agcacacgtt tgagaactgt ggtgaccgaa tccccgcccc 540
gcagaaatnc ttttcccacg ggagc 565

<210> 2886

<211> 539

<212> DNA

<213> Homo sapiens

<400> 2886

actgagtttg aggggtgcagt catagctctg ttccatttgt tggccaccan gacngacaaa 60
gtccgagctt tacgggaggc tttttatcgg cagaacttac ccaatctcat gaacctcatt 120
gctacagttt ttgtgtttgc tgttggtata tatttccaag gatttcgcgt tgatctgccc 180
attaagtcgg cccgttaccg angacagtac agcagctacc ccatcaaact cttctacacc 240
tccaacatcc ccatcatcct ccagtcggcc ctgggtgtcca acctgtatgt tatttcccag 300
atgctgtctg ttcgatttag tggcaacttt ttagtaaatt tactaagaca gtgggccnat 360
ttcagtgggg gaagaccgc acgttcttac ccagttggag gcctttgtta ctatctttct 420
cctcctgagt ccatgggcgc catctttgaa gatcctgtcc atgtcnttgt ttatatcatc 480
ntcatgttgg ggtcatgttc attcntctct aanacatgga ttgaagtgtc tggttccnc 539

<210> 2887

<211> 670

<212> DNA

<213> Homo sapiens

<400> 2887

aaaaaaaaat gaggcccctg cagcagcagc ggcgtggtca gagcgagctt cgganaagca 60
gtggtgggtt ccatgtgatg gtggagtagg aggcaggtct ccgcggttca tctgtgttgc 120
tctaaatgac actgcttcat tattttgatg gctgganaat atttctagtg gtatgtatat 180
ganagtttct tgatctcttt atctgtggat gaacagctac tttgaaacat atggtacatt 240

tgtgttaagg ctagtcaccc tgctgtggaa tagaaggcca gaattgatca gtctcatctg 300
 agagtaactt tgtacccatc actgattcct tctgagactg cctccacttc cccagcagcc 360
 tctggtttct tcatgtggct gcagatggca ggatttccca aaggtttctg gctgaaacat 420
 attccgtggg gtatctgtac agcagtttcc tcatccctgc agctgtgttt gaacaggcca 480
 ttaccatgc tgtcctccag gttcaacagt ntggctccaa aggatgaaat ttcattctga 540
 ttttctggct gaanactatt ctcttttgtg atgtccacca cagttacttt atcccttctt 600
 ctgtggatgg ggcantctcn ctgttttgcc cangctggaa tgcantggca tgatctcanc 660
 tcacttgcaa 670

<210> 2888

<211> 589

<212> DNA

<213> Homo sapiens

<400> 2888

ggacgtcacg gtcactgaca gcgtgagccc gcggcggctg ctgccatggg ggctggcggc 60
 cgggtaaggg tctgantgga tctcctgcca ggccagaacg ccttcggggg ccgcggcggg 120
 aggccangag tttgcancca gggcgccggg tttgtgtctt gcantgtcgt gaggctgagg 180
 tgcacatgtg ctagactggg agccctgggt ggtgcccgtg ccgggctggg actgttgctg 240
 ggtaccgccg ccggccttgg attcctgtgc ctcttttaca gccagcgatg gaaacggacc 300
 cancgtcatg gccgcagcca gagcctgccc aactccctgg actatacgca gacttcagat 360
 cccggacgcc acgtgatgct cctgcgggct gtcccangtg gggctggana tgcctcagt 420
 ctgcccagcc ttccacgggg aaggacagga caangtgctg gaccgcctgg actttgtgct 480
 gaccaccttg tnggcgctgc ggcgaggagt ggaggantg aaaaancagcc tgcgaaggct 540
 tgcgggggaa attgtttggg gaagtccgat gccacatgga naaaaaccn 589

<210> 2889

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2889

```

ttttcagtag cgtctcctcc ttattcattc acttttactg tgaanactga aatccaaaag 60
ccaggttccc caaaaaagta tttttaaaaa attttagggg accaaaataa atagaggaag 120
accaatataa aaaaatatgt tcaactattc cattttaaat ttaaagcaga aaaaaaaatt 180
gtgcccctca gacctaaagg cagcttttaa tgtatatagt ttggtgaaac atttgggaaa 240
tattaatttg gaggtttaga agcatacgaa aaacaaattc aaagcacttg aaagtaaaga 300
caatatcatg aggtcgaaaa aaacttcaaa aggatattag gtnaganaaa atgtgaatga 360
aagcagtga tttctgcctc tcctcgtatt tagggtactt aaaattacta aaaaatactg 420
tctttttacc atacagctag atggcctgta ttattcttaa tgtggccaaa ggantgaaga 480
ctgattaggg ttttagaatt tggaactgta gtcacataaa ggcatctttt gcatttctta 540
aaccagtaat ctacattttc tcctgggaaa tgggagaaat atgaaantgn tgctgtgcat 600
aagcttttgg gaatagaaan acaaagtttt aanagaatg ggatatgttt tccttgcnca 660
acttgtaaaa attttaattt aaaaaattta cctccatttt ttccaatcca taaagggtgc 720
ttttggcctc caanttttgt tggngaattgt tttggttccc atccccatta aaaaaccccc 780
tttcaccccn naactggtat tttngaaaat attg 814

```

<210> 2890

<211> 739

<212> DNA

<213> Homo sapiens

<400> 2890

```

ggattgggcc gccgctgctc atccccatgt atttccagta ccagatcatc atgaccatga 60
tcgtccataa gaactgggtg gacctggcct gggccgtcag ctactacatc cggttcttca 120
tcacctacat ccctttctac ggcatcctgg gagccctcct tttcctcaac ttcacaggt 180
tcctggagag ccaactggtt gtgtgggtca cacagatnaa tcacatcgtc atggagattg 240
accaggaggc ctaccgtgac tggttcagta gccagctgac agccacctgc aacgtggagc 300

```

agtccttctt caacgactgg ttcagtggac accttaactt ccagattgag caccacctct 360
 tccccacat gccccggcac aacttacaca agatcgcccc gctgggtgaag tctctatgtg 420
 ccaagcatgg cattgaatac caaganaacc gctactgagg gccctgctgg acatcatcag 480
 gtccctgaan aatctgggaa gccgtggctg gacgcctacc ttcacaaatg aagccacagc 540
 ccccgggaca ctgtggggaa aggggtgcang tngggatgat gccanaagaa tgatgggctt 600
 ttgttctgaa ggggtgtccga aaagctgggtg tntgcactgc tcacggaccc atgttggatc 660
 tttctccctt tctcctctcc nttntctctt caatctcccc catanencct ggccctcttg 720
 ggaacttgcc tcctcance 739

<210> 2891

<211> 464

<212> DNA

<213> Homo sapiens

<400> 2891

tttattaact ggaggcgacg gcggctgcgg cggcggcggg accgcctcct ccgggggtatg 60
 aaaatcggca gtgggttcct gagtggcggc ggangtaccg gcagtagcgg tggtancggc 120
 tccggcggcg gtggtantgg cggcggcggc ggccggcgca ncagcggcag gagggcagan 180
 atggaacca cctttcccca gggatatggtt atgttcaacc accgtcttcc cccggtcacc 240
 ancctcaccg gcccggcggg gtcggccgcc cctccccgc aatgcgtggt atcctcctct 300
 acctccgag ccccggccgc tganccccc cctccgccag ccccgacat gactttcaaa 360
 aaggagccgg cggcncagc cgcggccttc ccctcncana ngacctctg ggggttcttg 420
 cagtcttttg ttancatcaa acaggaaaaa cccgcggatc ctga 464

<210> 2892

<211> 575

<212> DNA

<213> Homo sapiens

<400> 2892

```
gtgccgtgcg tcgccttggg aacagangag catccgcgac acccccgggg agaccacccc 60
cagctgctgc tgccacactc gcgggcgctg cccggtaatg gcctggggga gtcccgagtc 120
cgacgcgccg ctggcctcag cctggacgcg gaccctccg cgagcgcgtc tgtgaccac 180
ggaaccggca ggcgctctct gcttgtggcg cccagagggc ggcgctgaca cgggcgcgat 240
ccgggaggcg aggcagggca gggcactttc gtcccggggc gatcccaaga gacgccggct 300
ctgggaccct cgccgggtcc tcgtcccgca gcctcttctc ggcctcccg c gatcctgcct 360
gcgccctctg cccaagactc gtctctcacg tcgggtcccc gccagtctcg ggancctctg 420
cttccctcgg ctcccgtag cccctcccg gacctctccc cctccacccc ctccccacc 480
ccggaggccg ggctggacgc taccanaac ctccgccacc cgcttctgcc actcnatgga 540
angacggtct tgctggagat cntgaccaan gacgg 575
```

<210> 2893

<211> 683

<212> DNA

<213> Homo sapiens

<400> 2893

```
naaaaatgtc tgtgtcttcc tggttgcgac atgcactgac ggcctaccaa ctggaaagtg 60
cagagtgggt ctgcaaatgg ttagaggaag catccattga ttttcgattt ggcaaaactt 120
acctgaaggg tatgagatat gcggtatttg gcctgggaaa ttctgcctat gctaaccact 180
tcaacaaggt tggcagnnat gttgacaagt ggctctggat gcttggcgcg catcgtgtga 240
tgagtcgagg ggagggcgac tgcgacgtgg ttnaaagcaa ncacggcngc attgaggccg 300
acttcagagc atggaagacc aanttcattc cccagctgca ggcacttcag aaaggggaga 360
gaaagaantc ctgtggcggc cactgcaana aaggcaantg ttaatctcac caacntggct 420
canaggagag ggaggaagga tctcatgacc aggatgaatt gcattctaga caccgagga 480
aggaanaacc tttgagagct ccaggtgaaa aanatttggg ggtgaggacc atcagacct 540
aattccattg ttgatgttna anatttgggc caaattatgg atcctgtgta naaagaacag 600
agagaatcga accgcccga aaaaaantct ggtttgttcc aggaacntg gggaagaant 660
```

gaaaattngt gaaaagaaaa act

683

<210> 2894

<211> 701

<212> DNA

<213> Homo sapiens

<400> 2894

```

ggctggtgta tttgtacatc tctcgggacg tgaaattgac agtgaaaagt atggcagatg 60
agcaagaaat catgtgcaaa ttggaaagca ttaaagagat caggaacaag accctgcaga 120
tggagaagat caaggctcgt ttgaaggctg agtttgaggc acttgagtca gaggaaggc 180
acctgaagga atacaagcag gagatggacc ttctgctaca ggagaagatg gcccatgttg 240
aggaactccg actgatccgc gctgacatca atgtgatgga aaacactatc aaacaatctg 300
agaatgacct aaacaagctg ctagagtcta caaggaggct gcatgataag tataagccac 360
tgaaagaaca tgtggatgcc ctgcgcatga ctctgggcct gcagaggctc cctgacttgt 420
gtgaagaaga agagaagctt tccttggatt actttgagaa gcagaaagca gaatggcaga 480
cagaacctcn gggagccccc cntccctgag tccctggccg ctgcagccgc tgccgcccac 540
cagctccaag tggctnggaa acangatact cggcagacgg ncccttcagg gcagcagccc 600
ccacctatga aggcctgctt gtctgtcccc ngcaaattcc ccgggaatgc cccctntttn 660
ccctctttgc aagggccaaag aatcngtccc cggaaccccc n 701

```

<210> 2895

<211> 500

<212> DNA

<213> Homo sapiens

<400> 2895

```

acctgaagtc caaggcactg cgggagcgct ggctgctgga ggggacgccg tcctcggcct 60
cagaggggga tgaggacctg aggaggcaga tgcaggacga cgagcagaan acacggctgc 120

```

tggaggactc ggtgtccang ttggagaagg aaattgaggt gctggagcgt ggagactccg 180
 cccagccgc tgccaaggag aacgcggcgg ccccgagccc agtccgggcc ccancgccga 240
 gtccagccaa ggangagcgc nagacagagg tggtgatgaa ttcacagcac acgccggtgg 300
 gcacgccccaa agacaagcga gtctccaaca cgcccctgag gacggttgac ggctccccc 360
 tgatgaangc antggtccat gctgtggacg gcaccgccga aaactggatc caccctga 420
 gctcctccta tgtggacgaa ctcatccacn aagcgnacga agtcncgtt agcgaagcag 480
 ggtccacngc cggggcngca 500

<210> 2896

<211> 151

<212> DNA

<213> Homo sapiens

<400> 2896

gataatattg ttccctcgt ccgtctgtct cgatgcctga ttcggacggg caatggtgct 60
 tccccaccc ctccgacgtg tccgtccacc ctccatcaa cgggtctcct cccagcggcc 120
 tccgngtct tgcccancag ctcaagaana a 151

<210> 2897

<211> 653

<212> DNA

<213> Homo sapiens

<400> 2897

gataaggaac ngaagacggt naaacaatg aatcgcaat ttcaaataat ataaacatgc 60
 agagttactc agtagaatg cctaccgtgt ctccagtgg aggcataatt ggcaccggaa 120
 tagatgaact gcagaagagg gtgccaaaat tgatctttaa gaaaggaagc agaaagaata 180
 cagataaaaa ctaccttaac tttgtgtcac cattaccaga catagtagga cagaaatcct 240
 tgtctggaac accaagtggc tcacttggca tagtatcaaa taatagtgtg gagaccattg 300

gtcttctcca aagtacaagt ggcaaacaag gtcagataag tngtaattat gatgatgcc 360
 tgcagttttc aaagaaaaga agatatattac canctgccag cagcaacagt gccttttcta 420
 taaacgtagg acacatggtc tcccaacagt ctgtcattca ntctgcangt gtcagtgttt 480
 tggacaatga ngcaccattg tcacttattg actcctcagc tctaaatgct gaaattaaat 540
 cttgtcatga caagtctgga attcctgatg aagttttaca aagtattttg ggatccatac 600
 tcccncaa at cagaaagcca naaagaagat cctttccatn tttgcanaac cnc 653

<210> 2898

<211> 896

<212> DNA

<213> Homo sapiens

<400> 2898

ggctcgtccc ttccccacc cccagccgcc gccgccgcc gcgcttcgca acaaagccgg 60
 ctgcggagcc atggtccacg ccgcccgcc gcgacccgc cgccccgcat ggtagccgga 120
 acgtctctcc cttaccagcc ttcgcttctt ggtgcccagc tcttaggacc gtgtgtgact 180
 ctggccttct accgagacaa cagagaaacg cacagcaact cgcatggagg aatcggcgaa 240
 atggctccga ccgcggcgct ggggggcggg gccagcgagc ggtgttgaaa gcagcagggg 300
 cctagaagac attaaaccga taccacagaa atacaangga tcattagaga ctattatgaa 360
 caactatatg ccnacaaatt ggaaaccaa tggaaatgga taaattcctg aacagatacc 420
 acttaccaga attggaccaa gaaagaaata gaaaacctga aaagaccaac tatgagtaat 480
 gagattaaat cagtaataa gagtctccca tcaaagaaaa gtccaggccc tgatggcttc 540
 actgctgaat tctactgaac agttnaagaa gaactcatac cagttctcaa actcatcctg 600
 tgagggcagc attaccctga taccaaaact agatttgac acaagaaaaa aaatctatng 660
 gccngtatcc cctgatgaac atagatncca gaaatcctcc aacaagaacc aggttttttg 720
 ttggtttcat gccttgtaa tccanccac ttttggggaa ggcccaaggc caggtnggat 780
 caccctnaag gtccgggnaa ttttgaaaaa ccgccctggc ccacattggc aaaaccctg 840
 tttgttctt aaaaattcna aaatttttcc cgggccaagg ttgggcnttn ttcnt 896

<210> 2899

<211> 645

<212> DNA

<213> Homo sapiens

<400> 2899

```

gtgacgcagc ccgggtctca ggggaacatg gcggcgctgg tgagacccgc gaggtttgtc   60
gtgcgaccgt tgctgcaggt ggtccaggct tgggacctg acgcgaggcg ctgggtccgg   120
gcgctgcggc ggancccgat gaaagtgggtg tttccttccg gagaggtggt ggaacagaag   180
cgcgctcctg ggaagcagcc ccgcaaggca ccatctgagg ccagtgccca ggancaacga   240
gagaaacaac cgctcgagga gtccgcatcc cgcgctccca gcacctggga agagtctggg   300
cttcgctacg ataaagctta tcccggggac aggaggctga gcagtgtaat gacaatngta   360
aagtccaggc catttcggga aaaacaaggg aagatcctgc tggaaggctc cangctcatt   420
tcanacgctc tcaaggctgg agctgtgcc aaaaatgttct tctttagccn tctagaatac   480
ctaaaggagt tgccagtcga taagctgaaa ngtgtcagcc tcattaaggt gaaatttgan   540
gatatcaagg attggtccga cctcgtaacg cccaaggaa taatggggat ttttgccnag   600
cctgaccatg ttnaaatgac tatecnaaga ctengcttcn cattc                       645

```

<210> 2900

<211> 485

<212> DNA

<213> Homo sapiens

<400> 2900

```

gactctggga tcggcggcgc tatnagttct ttcgaggggc agatggccga gtatccaact   60
atctccatag accgcttcga tagggagaac ctgagggcc gcgcctactt cctgtccac   120
tgccacaaag atcacatgaa aggattaaga gcccctacct tgaaaagaag gttggagtgc   180
agatnaggaa actgaggaac cagagagggt aaattagttg cccagtgtca cacagccagt   240
aagtggcagg accaggattc cagccagctt gaaggtttat ctatactgtt cacctgtgac   300

```

taaggagttg ttgttaacga gcccgaata cagattttgg aagaaacgaa ttagcantca 360
 caacagcagg gttgttcctg ttgtctctgg cattcagctt gaagttacta caggtcagcc 420
 cggccagcan tcaggaagga aagctggaan anaagtggag gggaacagan acaaactgga 480
 angca 485

<210> 2901

<211> 692

<212> DNA

<213> Homo sapiens

<400> 2901

aaacagagta ttgtatggga gtttgaaaaa taccagcgat tactagagaa aaagcagcca 60
 ccacatcggc agctgggggc agaggttagca gcagctctgg ccagcctaca gcgggaggca 120
 gcggagacca tgcagaaact ggagttgaac catagcgagc tcatccagca gagccaggtc 180
 ctgtggagga tgattgcaga gttgaaagag aggtcgcaga ggcctgtccg ctggatgttg 240
 caggatattc aggaagtgtt aaacaggagc aaatcttgga gcttgcagca gccagaacca 300
 ntctccctgg agttgaagac agattgccgt gtgctggggc taagagagat cctgaagact 360
 tatgcagctg atgtgcgctt ggatccagat actgcttacc cccgtctcat cgtgtctgag 420
 gacagaaaac gtgtgcacta tggagacacc aaccagaaac tgccagacaa tcctgagaga 480
 ttttaccgct ataatatcgt cctgggaagc cagtgcattt cctcaggccg gcactactgg 540
 gaggtggagg tgggagacag gtctgagtg ggctgggan tatgttngcc aaatgtanac 600
 cgggaaggag gtggtctact tatcccccca ctatggattc tgggtgataa ggctgaagaa 660
 agggaaatga attccgagcc nggcccnnat na 692

<210> 2902

<211> 541

<212> DNA

<213> Homo sapiens

<400> 2902

```

aaattgttca gttactgcgt gaaggtgaaa gtcaaccggc agcaactggt caaactggaa 60
atgaacacct tgaacgtcat gctggggacc ctaaacctgg cccttgtagc tgaacaagaa 120
agcaaggaca gtgggggtgc agctgtggct gagcagggtgc ttagcatcat ggagatcatt 180
ctagatgagt ccaatgctga gcccctgagt gaggacaagg gcaacctcct cctgacaggt 240
gacaaggatc aactggatgat gctcttggac cagatcaaca gcacctttgt tcgctccaac 300
cccagtgtgc tccagggcct gcttcgcata atcccgatcc tttcctttgg agaggtggag 360
aaaatgcana tcttgggtga gcgattcaaa ccatactgca actttgataa atatgatgaa 420
gatcacagtg gtgatgataa agtcttcctg gactgcttct gttaaataac tgctggcatc 480
aanaacaaca gcaatgggca ccagctgaan gatctgattc tcccgaangg gatcaccag 540
a 541

```

<210> 2903

<211> 480

<212> DNA

<213> Homo sapiens

<400> 2903

```

tgaatagaag gctgggtccag cggcggcgga agctggcgct gtcctgagag ggagggctct 60
gtgcggaana aatgaatcgg acaaagggtg atgaggagga gtattggaac agctccnagt 120
tcaaggcttt tacctttgac gataaaaacg atgagctttc acagttaaag gagtccaagc 180
gggcggtgaa cancctccga gacttcgtgg atgatgatga cgatnatgac ctggagcgag 240
tcagctggag tggggaacct gtgggaagta tctcatggtc catcanagag actgctggtn 300
atagcggctc aaccacagag gggcgtgaac agctnaagag ccgaaacagc ttctcctcct 360
atgcacaact acccnagcct acttctacct actccctgan cagctttttt agaggtngaa 420
ctagacctgg aagtttccag tccctttctg atgctctgtc anacacncct gccaaaanct 480

```

<210> 2904

<211> 652

<212> DNA

<213> Homo sapiens

<400> 2904

```

ggccatctct gggcggcggc ggcgggcggg gtctgcgcgg tcggtgagac ccgcgcgggt 60
gagacgctgg ccctccttac agcctagaaa aaatgacaga tctcgtagct gtttgggatg 120
ttgctttaag tgacggagtc cacaagatcg aatttgaaca tgggactaca tcaggcaaac 180
gagtagtata ttagatgga aaggaagaga taagaaaaga gtgatgttc aaattagtgg 240
gcaaagaaac attctatgtt ggagctgcaa agacaaaagc gaccataaat atagacgcta 300
tcagtggttt tgcttatgaa tatactctgg aaattaatgg gaaaagtctc aagaagtata 360
tggaggacag atcaaaaacc accaatactt gggtattaca catggatggg gagaacttta 420
gaattgtttt ggaaaagat gctatggacg tatggtgcaa tggtaaaaaa ttggagacag 480
cgggtgagtt ttagatgat gggactgaaa ctacttcag tatcggaac catgactgtt 540
acataaaggc tgcagtngt gggaancgga aagaanggat tattcact ctcattgttg 600
gataatagag aaatccana gattgcaagt taatgaattt tcntcttaag aa 652

```

<210> 2905

<211> 600

<212> DNA

<213> Homo sapiens

<400> 2905

```

gactggcggc aggctcgccg cggcgcggag tcccggctgc gggatagacc gagggccatg 60
gccgcctctc ccggaccgc cggcgttggc ggcgccggan cagtctacgg ctccggctct 120
tcgggcttcg ccctcgactc gggactggan atcaaaactc gctcggtgga ncanacgcta 180
ctcccgctgg tttctcagat caccacgctt attaatacata aagataatac caaaaagtct 240
gataaaactc tgcaagcaat tcagcgtgta ngacaagctg tcaacttggc agttggaaga 300
tttgttaaag tangagaagc tatagccaat gaaaactggg atttgaaaga agaaataaat 360
attgcttgta ttgaagctaa acaagcagga gaaacaattg cagcacttac agacataacc 420

```


aacttgaacc atctggaatc tgatgggcag atcacaatth ttacagacaa aacaggagtg 480
ataaaggctg caagattact tctttcttca gtgacaaaag tgttggtgct ggcagaccga 540
ntnntcntta aacagataat aacatcaaga aatanggttc tcgcaactat ggaaagacta 600

<210> 2906

<211> 788

<212> DNA

<213> Homo sapiens

<400> 2906

tgtgtgttcc ctcaaattggc ggtgtgaaga gatttcgcct gagccagatc ccaggtttca 60
ctgaagaaac ttcttagagg ttcatcgcac ttctgagatt taatgtttac aacttggagt 120
tgtcgacctt cttataagat acatttttga agtcaaaatg aaagttttct gtgaagtttt 180
agaagagtta tacaagaagg tacttcttgg agccacactt gaaaatgaca gccatgatta 240
catcttttat ctcaaccag cagtttcaga tcaagattgt tctacagcca cctccttaga 300
atgggcaaac acctgtggtt tccagggcag gcatcagccc atctctgttg gtgtggctcc 360
cattgctgta gcacctgtgt gtttgaagac caactctcag atgagcgggt ccagagaagt 420
aatgctcctt cagttaacag tgatcaaagt gatgacaacc cggatattgt ctgtcaaac 480
cgagttccat gcaaaggagc agtacagaga tgtaattaaa attctcttag aatcagccaa 540
agtcgattct aaattaatct gcatgttcca aaattcagat aaattgttat ctcacatggc 600
tgcacagtgc ctgcatcgtc ttctatatth ccnattgaag anaaaaagat aaccttaagt 660
aatccttggg attgcttttt ggcccagaaa aatctttctg aatactctga aaatttataa 720
agcnatattc tggctctngg aaccctacng gcaatnataa aaaaaaatct tttaaagaat 780
ccnggttc 788

<210> 2907

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2907

```

cccggatgtg gagaagctgg ggagaaggcg tgggaggaag atggactcgg tggagaaggg 60
ggccgccacc tccgtctcca acccgcgggg gcgaccgtcc cggggccggc cgccgaagct 120
gcagcgcaac tctcgcgggc gccaggggccg angtgtggaa aancccccgc acctggcagc 180
cctaattctg gcccggggag gcagcaaagg catccccctn aanaacatta agcacctggc 240
gggggtcccg ctcatggct gggtcctgcg tgcggccctg gattcagggg ccttccagag 300
tgtatgggtt tcgacagacc atgatgaaat tgagaatgtg gccaaacaat ttggtgcaca 360
agttcatcga agaagttctg aagtttcaaa agacagctct acctcactag atgccatcat 420
anaatttctt aattatcata atgaggttga cattgttang aaatattcaa gctacttctc 480
catgtttaca tcctactgat cttcaaaaag ttgcagaaat gattcgagaa gaangatatg 540
attctgtttt ctctgttgtg agaccnctcn gtttcgatgg gagtgaaatt cagaaangaa 600
ttcgtgaagt gaccnaacct ct 622

```

<210> 2908

<211> 475

<212> DNA

<213> Homo sapiens

<400> 2908

```

ggatgtttta tggggatgtg gagattcatt gtactgtttc tatatttttg tggatgttga 60
aaaatatttt ctctttttt ttttttgaga tggagtctcc ctctattgcc caggctggag 120
tgcagttgtg caatctctgt tcaactgcaac ctccgcctcc cgggttcaag tggttctcct 180
gcctcagcct cccaagtagc tgggactaca ggcatgtgcc accatgcctg gctaactttt 240
gcatcttttag tagagatggg gttttacat gttggccagg ctggtatcga actcctgacc 300
ttgtgaccgg cccaccttgg cttcccaaag tactggaatt acaggcataa gccaccacac 360
ccggccgaaa aatatattta aaaaagtang aaacacacaa gacangcagc ttggacttat 420
cttctccatg atacctaccc nggtatccct gtgagcagct gacattcctt tctcc 475

```

<210> 2909

<211> 746

<212> DNA

<213> Homo sapiens

<400> 2909

```
gtattcctac tgtgctctct gaggatgtgg atgctgttga tctgcggacc acactttgag 60
aaatacacag gtgacagctg tgggtggaaag aactcccatc caggaatcaa aacatgtctt 120
cacatttttg ccatggaact tgggggtctt gctttgttgc tcaggatgga gtacagtggg 180
gcaatcttgt ctactgcag catcgacctc tggggcttaa gccatccttg cacttcagcc 240
tcccaagtag ctggtactac aggggatgca acaacaaggc gccntcttgg aantagacac 300
caggccctca ccanacacca aacctgctgg tgcctcgatc ttcaatttcc agcctccaga 360
gtgtcatggg ttctggaaaa aaagactcaa gatgttctca gtagctgctg ttttcagaca 420
tcatgaaagt cttctcctac cctctataaa aacaacaat aaaactctac aaaggaaaag 480
cccacaaaaa catgctgact ttagaanaat ccatgattta gaatatattt ataaatatct 540
nanaaaacag gantcctttc catatatatg gtccttgga aatactttcc atatatatgg 600
tccttggaat atccagtttt tatgananaan gtgatttccc aaatctctta cactttacaa 660
tttcaatttt ggcctganca tatctctccn attgatctac ctactacata ctgatctntc 720
ttgggataaa cactggacna aanggt 746
```

<210> 2910

<211> 801

<212> DNA

<213> Homo sapiens

<400> 2910

```
atttcttaag gtggagtctc gcactgtcac ctgggctgga gtgcagtggc atgatctcgg 60
ctcactacaa cctttgcctc ttgggttcaa gtgagtctcc tgtctcagcc tcccaagtag 120
ctgggattac aagtcccac caccacgcc agctnatttt ttgtattttt agtagagaca 180
```

gggtttcacc atgttgcca ggctggtctc aaactcctga ccttgtgatt tgcctgactt 240
 ggcccccacaa agtgctggga ttacaggctt gagccaccat gcccgcccaa gactatTTTT 300
 tagaaccata accacaatac agttaccaca cttttgaaag tcgatgggaa ttccttaata 360
 tttaaatttc tcaataggct aatttttatt tttagggatg ggggcttgct gtattgacga 420
 nactggagtg cagtggctat tcctgagtat tgcatagtg actacacctc aaacacctgg 480
 gctcacatga tcctcctgcc tcagtgtccc gagtaatant gcagggactg tangcactta 540
 ccgctgtgat ctgcttancat catacatTTT aaaaaataa ttggttcaaa tcaggatcca 600
 aaaaagttac ataaattgtg tttgattaat gcgtacttgg gtccttttaa atctaaaaat 660
 gtctctcatc ttttttaaaa aacattattt gttgaaaaaa aatgaattta ttcgggttta 720
 attcccccat tccaaaactt tactgaatgt ttcccatga attcctctgn cccctttgn 780
 ttttctgtt nactaatng t 801

<210> 2911

<211> 730

<212> DNA

<213> Homo sapiens

<400> 2911

gtactctgat tggtagcggg tgaggcggcc cgaaatcgta ngacttccga aagcagcgg 60
 ggcgtttgct tcaactgctt gaagtgtgag tgcgcgaaaa tgcgaaagggt ggttttgatc 120
 accggggcta gcantggcat tggcctggcc ctctgcaagc ggctgctggc ggaanatgat 180
 gagcttcac tgtgtttggc gtgcaggaac atgagcaagg cagaagctgt ctgtgctgct 240
 ctgctggcct ctcacccac tgctgaggtc accattgtcc aggtggatgt cagcaacctg 300
 cagtcgggtct tccgggcctc caaggaactt aagcaaagggt ttcagagatt agactgtata 360
 tatctaaatg ctgggatcat gcctaataca caactaaata tcaaagcact tttctttggc 420
 ctcttttcaa gaaaagtgat tcatatgttc tccacagctg aaggcctgct gaccagggt 480
 gataagatca ctgctgatgg acttcangaa gtgtttgana ccaatgtctt tggccatttt 540
 atcctggtaa anaagctgtg ggcttaataa gctaataatt cgtgtgataa tttctgtaaa 600
 gctctgggca canggcattt attatagttg aacaccngtt nactgaattt aatctcatgt 660

ttgaattttc cttgattgca ntttgccctt ggtttattgt naaacatgga atacttctgg 720
naaaccttcc 730

<210> 2912

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2912

ggagggggcg tcgggaaagc ccccgacttc gcagccttac actcttcgtg ggcggcgacc 60
gcgccccac tgacatcatt cctcatgagg gaggaggcac aaacagttct gggccgacca 120
gaaaaaggac gactgggact tgactctgaa tcgcaggatt tgaagagatt tctcctggct 180
tcccaacgag gctggtggga agcggtcctc ctcccataca cgacctcca ccctcgcgag 240
gcgtaaaaaac cagttctgac tgtacagtaa agcgagggcc agggctgagg tctggaanct 300
aatgaaagca cagaaagtgt cnaaactgga tgagcaggaa gcgagtggcc tcccctgtca 360
tctgacgttt tcccagggat gtaatttgcc tgactggaaa cagatcagga ccaacagggg 420
agagttttcg atttagtgtg aggaaaagan cactanattg tagcaaaaga ccttattgct 480
caaggcccag tcagaanatt tcataaggga agctgttnaa agtcttaa 528

<210> 2913

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2913

tcatcccagt tcatnatgat ctcttgatcc atgcaaacct taccacgtg accttctggg 60
gaaccacgaa agtagaaatc acagccagtc agcccaccag caccatcatc ctgcatagtc 120
accacctgca gatattctagg gccaccctca ggaagggagc tggggagagg ctatcggaag 180
aaccctgca ggtcctggaa cccccctc aggagcaaat tgcactgctg gctcccagc 240

ccctccittgt cgggctcccg tacacagttg tcattcacta tgctggcaat ctttcggaga 300
 ctttccacgg attttacaaa agcacctaca gaaccaagga aggggaactg aggatactag 360
 catcaacaca atttgaaccc actgcagcta gaatggcctt tccctgcttt gatgaacctg 420
 ccttcaaagc aagttttctca atcaaaaatta gaagagagcc aaggcaccta gccatctcca 480
 atatgccatt ggtgaaatct gtgactgttg ctgaaggact catanaanac cattttgatg 540
 tcnctgtgaa gatnancacc tatct 565

<210> 2914

<211> 773

<212> DNA

<213> Homo sapiens

<400> 2914

aagatgcaca agtaccttta accaaccata agaaatcaga aaagcaagat aaagttcagc 60
 acacagtatg tatggattgc agtagctaca gtacatactg ttatcgctgt gatgattttg 120
 tggttaatga caccaagctg ggactgggtac agaaagtcag agaacactta cagaacttgg 180
 aaaactcagc tttcacagct gacaggcata agaaaagaaa acttttggaa aactcaacac 240
 taaacagcaa gttattaaaa gtaaatggaa gcaccactgc catttgtgcc acaggccttc 300
 ggaatttggg gaacacatgt ttcattgaatg ccatccttca gtcactcagt aacattgagc 360
 agttttgctg ttatttcaaa gaactgccccg ccgtggagtt naggaatggg aaaacagcag 420
 gaaggcggac ataccacacc aggagccaag gggataacaa tgtgtctttg gtagaagagt 480
 ttagaaagac actctgtgct ttatggcaag gcanccagac tgcatttagc ccagagtcct 540
 tattttatgt tgtntggaan attatgcaa actttagggg ctatcaacag cagggacgcc 600
 catgaattcn tgcgctacct tttgggacca cctncacttg gaacttcnng ggcgggtttc 660
 acggtgtttc ccgctcanca attctgcagg aaaattctac tctgtctgcc aattaccaag 720
 ttnttgcata aattgaacat ctactgttng tcncggctat tttccngaaa ggc 773

<210> 2915

<211> 715

<212> DNA

<213> Homo sapiens

<400> 2915

```

agcttctttg tctctggctg ccgctggaac tccgggtctc gtcttcactg ctctgtgtcc 60
tctgctccta gaggcccagc ctctggctct gtgacctgca ggtattggga atccacagct 120
aagacgcccg gacaccctgg aagcctagaa atggacaacc tgaggtatgg agtgtatcct 180
gtcaaggggg caagtggata ccctggggct gagaggaatc ttctggagta ctcttatttt 240
gaaaaggggc cgttgacatt tagggatgtg gtcatagaat tctctcagga ggagtggcaa 300
tgcctggaca ctgctcagca agatttgtat aggaaagtga tgtagagaa cttcanaaac 360
ctggtgttct tgggtattga tgtctctaag ccagatctga tcacctgtct ggagcaagga 420
aaagatccct gggaatatga agagacacag tatggtagcc acacccccag atggagtttc 480
actgttgttc cccaggccgg antgaaatgg cgcgatttca cctcgctgtg tcccaggttc 540
aagcanttct cctacctcag cctcccgagt atctgggatt acgggcataat gccaccacac 600
ccagcttaat ttgtattttt antagaaaca nggtttctcc atgttgggtca ggctagtctc 660
gatctcctga actcaggtna ttcaccacct cngcttccca aagtgccngg attac 715

```

<210> 2916

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2916

```

accagaagca ttnaatgtta tcgtaaggct aattgaacaa gccccaattc aaatgggana 60
agaggcagtg aggtgggcaa aactgggtcat acctttagt gttcattcag cacaaaaggt 120
acatttgccg ggagcaactg ctctggagat gggaatgcca ttattgcttc agaaacagca 180
agaaatagca tctattacgg agcagcttat gactactaaa ttaatctcag aacttcagaa 240
gctattttat agtaaaaatg agacttacgt gttaaaatta tggcctttgt ttgtcaaact 300
acttgaagga accttgcac gaagtgggag tttcatcaat tctctcttgc aactagaaga 360

```

acttggattt cgtagtggag cacccatgat taaaaagata gcttttattg cttggaagan 420
 tttaatagat nattttgctt taaatccaga tatactatgt agtgcaaaaa gactcaagtt 480
 gttaatgcag cctttgagtt ccatccatgt tgagaacaga aactctagca ttaacaaaac 540
 tagaantctg gtggtattta ctgatganac ttggacctca tcttcctgct aattttgaac 600
 aggtttgtng tgcctctgat tcnaaagtac aatnagcatt gattctnatg cctc 654

<210> 2917

<211> 675

<212> DNA

<213> Homo sapiens

<400> 2917

gtgcagcttg gtggcggctg anccggcagc gggccgcctc aggcagcccc ggccggggccg 60
 cccgggtccc cggcagcggg gtangatggc gctaaagcgg atccanaagg aattaaccga 120
 cttgcagagg gatcctctg cccagtgttc tgcangacct gtcgggtgatg acttgttcca 180
 ctggcaggcc accatcatgg gcccgaaatga cagtccttac caaggangtg ttttcttcct 240
 gaccatccac tttcctacag attaccggtt caagccccca aaggttgctt tcacaaccaa 300
 aatttatcac cctaatatca acagcaatgg cagcatctgc cttgatatcc tgcgggtctca 360
 gtggtctcca gcgttgactg tgtcaaaagt tctcttgctc atctgctcgc tgctctgcga 420
 ccccaacccc gatgaccccc tgggtgccaga aatagcacac acctacnagg ccgacagaga 480
 gaagtacaac agactagcaa ganaatggac acaaaaatat gctatgtaag tgccttggaa 540
 gttttacatg aaacactgtc caagaaaanc tggcagaaaa gtcttcctt aaaactttgg 600
 gctgttggct gaaccattca aanaacatca tctgttcttc aaacaaatnt tngtcaccac 660
 tctctccanc tngca 675

<210> 2918

<211> 708

<212> DNA

<213> Homo sapiens

<400> 2918

```

ggagcccctc agcggcggcg gggctctgtga gttggtcgcg gggctcttggc ggggaatgga 60
ggtagaataa acgtgggacc cggagtgacac caaggtgaga aaaaaaaaaat tactaaaaat 120
gacaagtaga anacttgagg agtccatggg ggctgttcan atgggattgg tcaatatgtt 180
caaaggattt caaagcaagg ttttgccacc cctgagtcca aagggtggtta cagaanaaga 240
agtaaaccga atgcttacac cctcagagtt cctgaaggaa atgtccctga ccaccgagca 300
gagactggca aaaacacgtt tgatgtgccg accacagatc atcgaactct tagatatggg 360
ggaaacaaca catcagaagt tttcaggaat tgacctggat caggcattat tccagccctt 420
tccatcagaa attatatttc agaactacac tccctgtgaa gtctatgaag ttccactgat 480
tttgaggaac aatgaccaa ttccaagggt ggtgaaagtt gtgnaaaaaa ntgcctta 540
ctttaaagta atcagcccca aagatattgg ccacaaagtg gctcctggna gtgccttcca 600
tattccgaat cctctttact ccanaagaaa aacaaggatt acgcccatac ctnaacctt 660
gtgttactga aanaaaaaat ttattgtnc ccatcaagct ngaagggc 708

```

<210> 2919

<211> 707

<212> DNA

<213> Homo sapiens

<400> 2919

```

acaagaagga cgaggagtct ggtagtggct ccaatccttt ccagcatctg gagaagagtg 60
ctgtttttaca ggaggctcgt atattcaatg aaactccaat caatccaaga agatgtttgc 120
atattcittac aaagattctt tacttactga accagggtga acactttgga acaacggaag 180
ctacagaagc cttctttgca atgacgcgat tgtttcaatc taatgatcaa acattgagga 240
gaatgtgcta ccttaccatc aaagaaatgg ctaccatctc tgaggatgtg ataattgtca 300
caagcagtct gactaaagac atgactggaa aagaagatgt ataccgaggc ccggccatca 360
gagctctctg caggatcacc gatggaacna tgttgcaagc cattgaaaga tacatgaagc 420
aggccattgt ggataaagtt tccagtgtat ccagttcagc actggtatct tccctgcaca 480

```

tgatgaagat nagctatgat gtggttaagc gctggatcaa tgaagcccaa gaagctgcat 540
 caagtataa tattatggc cagtaccatg cattggggag tcctgtttcc cttagaaaga 600
 atgacgact tgctgtttcc acatgttgaa taagtttact aaggctctgt cccaagtcac 660
 agtttgctta ctgcatgctg atccgaattg ccngtcnctt actnaaa 707

<210> 2920

<211> 634

<212> DNA

<213> Homo sapiens

<400> 2920

gctgcgatgg cggaggccgt ggagcgcact gacgagctgg tccgggagta cctgctcttc 60
 cgcgggttca cgcacacact gcgcagctg gacgccgaga tcaaggcgga caaggagaag 120
 gggttccggg tggataanat tgtggaccag ctgcancagt taatgcaggt gtatgacttg 180
 gctgcccttc gggattattg gagctacttg gagcgtcggc tcttcagccg cttggaggat 240
 atatacagac ccacaatcca caagctgaaa accagcctgt ttcgatttta tcttgtctac 300
 acaatccaga caaacagaaa tgacaaggct caggagtctt ttgcaaagca ggccacggaa 360
 ctccagaacc aggctgantg gaangattgg tttgtcctgc ccttcctgcc atccccggac 420
 accaacccea cctttgctac ctacttttct cgacagtggg ctgacacctt cattgtgtcc 480
 ctgcacaact tcctgagcgt cctgtttcag tgcatgccan tccctgtgat cctgaacttt 540
 gatgcggant gtcagangac taaccaggtt caagaanaaa atgaattctg cgtcagaanc 600
 tttttgcatt gcaagctgaa atccnccgac tgaa 634

<210> 2921

<211> 551

<212> DNA

<213> Homo sapiens

<400> 2921

ttcacatgat caaggaagtt tatggatgcg tttgtggaaa tcttactcta tgaacttggt 60
 ggattagatg ctgttttatt ctctactaag tgaaaagtgc tttatttcag tgctttccca 120
 tggttgggag agagtagctg ttaactattc tgggtaatgg gggtgagtat gttgaggaag 180
 agatttagaa ccagaagagt gaagagactc aaactgttcc ataacaagga aagctttaa 240
 gaccttgat ttcacagtct ggagaactag agggatctga ctcttggtca gttcatgtaa 300
 caaattattt attgagtact tgctgggctc tcaagattca tgctttgagc acaggcagtc 360
 attcagtttc cngtccacct gattacatca gcatgcactt agttttcttt cttgttcaca 420
 aggacttttg atcatgcaag acctggccna gtcttctata atccanatgg gtttcctggg 480
 gctgttactt ganttttctt gtcaaaatat tttcgtgaac cctgcctctc ttancaaaca 540
 ctacttenta n 551

<210> 2922

<211> 494

<212> DNA

<213> Homo sapiens

<400> 2922

aactttttcc catccgtagc cttaaattcc cgagctgccc gggcggatcg tantgttgat 60
 tggagggatg agaatacccg ccgggtccga ttggccactg tctccgcctg cgttctcgga 120
 gtagcttccc tgcgggtggg ctggagttcg gcggccggcg tagggcgcg ccctgcaggg 180
 cgggtgggagc ctccccgggg ctgctcgtgt tgcagcttgg gatgatactg gcggaacgca 240
 ggaccccaac tcccaaacct gcggaccttg accacggacg anccctgtcc canctcccca 300
 cgtgccccag ggggaccaga gcaggcagga cgccttccaa ntattcaagg gccgctggtt 360
 gcctacgctt cgtccccttg tttcttgaac aaccgttagg gaccaggggt ncccctcagg 420
 gangccacag tccggggctg gggcgctcat tgatgcantg atcacacaac angccgcccc 480
 cctgaagaaa ctnc 494

<210> 2923

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2923

```

aaaaaaatcg ctgggcgact gatttcgant ttccggtcag gttaagccgg gggggtgcgg 60
tcctggtcgg aangangtgg anagtcgggg gtcaccaggc ctatccttgg cgccacagtc 120
ggccaccggg gctcgccgcc gtcattggana gcggaggggcg gccctcgctg tgccagttca 180
tcctcctggg caccacctct gtggtcaccg ccgccctgta ctccgtgtac cggcagaagg 240
cccggtcttc ccaagagctc aaggagagcta aaaaagtcca ttgggtnaa natttaaaga 300
ntattctttc agaagctcca ngaaaatgcg tgccttatgc tggtatanaa agaactgtgc 360
ggtctgttaa aaaaacgctt aacagccant ttgtggaaaa ctgcaanggg gttattcacg 420
gctgacactt cangaacaca agattgtgtg gaatcnaacc acccaccttt gggaatgatt 480
gctc 484

```

<210> 2924

<211> 741

<212> DNA

<213> Homo sapiens

<400> 2924

```

aaaaatctat gattcagctt ttcatcctga cactgggtgag aagatgattt tgataggaag 60
aatgtcagcc caggttccca tgaacatgac catccacagg ttgtatgatg acgttttaca 120
ggactacgcc ggctgtgctg ttctggcagt ggattaacca gtccttcaat gccgtcgtca 180
attacaccaa cagaagtgga gacgcacccc tactgtcaa tgagttggga acagcttacg 240
tttctgcaac aactggtgcc gtagcaacag ctctaggact caatgcattg accaagcatg 300
tctcaccact gataggacgt ttgtttccct ttgtgccgt anctgctgct aattgcatta 360
atattccatt aatgaggcaa agggaaactca aagttggcat tcccgtcacg gatgagaatg 420
ggaaccgctt gggggantcg gcgaacgctg cgaaacaagc catcacgcaa gttgtcgtgt 480
ccangattct catggcagcc cctggcatgg ccatccctcc attcattatg aacacttttg 540

```

aaaanaaagc ctttttgaan angttcccat gggatgaatg cccattcaa gttgggtag 600
 ttggcttctg tttggtgttt gctacacccc tgtgttgtgc cctgtttcct canaaaattc 660
 cattgtctgt tacaancttg gaagccgaat tgcanccttag atccaagaaa accctcctga 720
 attgngacnc tgttcttcca t 741

<210> 2925

<211> 774

<212> DNA

<213> Homo sapiens

<400> 2925

gttgcctgag cagtgggctg cttangaaga gaaggtcaga gttcgcgggg gcagaggcat 60
 tcttgccgct ggcccagtc cttatgtagt gaggggcaga caccctcccg caaattcttg 120
 aaggttctta ntctcgacta gggcagtagc cccaggactc ctagtcgccg gcttcaggtc 180
 actgccggct gaacggagct gccgtcgcca tgtttggctg cttggtggcg gggaggctgg 240
 tgcaaacagc tgcacagcaa gtggcagang ataaatttgt ttttgactta cctgattatg 300
 aaagtatcaa ccatgttttg gtttttatgc tgggaacaat cccatttcct gaggggaatgg 360
 gaggatctgt ctacttttct tctcctgatt caaatggaat gccagtatgg caactcctag 420
 gatttgtcac gaatgggaag ccaagtgcc tcttcaaat ttcaggtctt aaatctggag 480
 aangaaccaa catccttttg gagccatgaa tattgtccga actccatctg ttgctcagat 540
 tggaatttca gtggaattat tanacagtat ggctcancan actcctgtag gttatgctgc 600
 tgtatcctca gttgactcat tcaactcagt cacacaaaaa natgttggac aatttctaca 660
 attttgcttt catcatttgc tgtctctcag gcccaaaata acnccnagcc catcttaaaa 720
 tgttccattc cnggcaaatt ttggttctna aaattgggtt ttnaaaaaaa aaaa 774

<210> 2926

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2926

```
actcttggcg ccttcgcgga aggtgcgtcc gagccatggc cgctgccaac ccgtgggacc 60
cggcgtccgc gcctaacggc gctgggctag tgctaggcca cttcatagct tcggggatgg 120
tcaatcagaa aaacctggaa attgaactcc tgaaactaga aaaagataca gcagatgttg 180
ttcatccttt ctttttggag atgaagtctt gctatgttgc ccaggctggc ctcgaactca 240
tggcctcaat tctcccgttt cagtctccca aaacactgcg attacagctc agaagtgtca 300
tactctgcaa agcatgaata atcatttggg agcagtgttg aaaganaaga natcccttag 360
gcaaagactg ttgaaaccca tgtgccagga aaacttacct attgaagctg tttatcacag 420
atatatggta catttgctgg agttggctgt gactttcatt gagagattag aaaccacact 480
tgaaacaatt agaaatattc ctcatcttagc tgcaaacta aagaaaatga accaggcttt 540
ancaaagatg gatataattg tgactgagac agaagaactg gcagaaaaat atnctccnag 600
tggcggttaac aacaaaaacg aaantttccg tcttgtttcc cccaaaatnt tanct 655
```

<210> 2927

<211> 665

<212> DNA

<213> Homo sapiens

<400> 2927

```
gagttgaaag aggccatcaa gatcctggag agcctcaaga acatgactgt ggagcagctg 60
ctgacgggct cgccacctc tccgactgtg gagcctgaga agccaactcg ggagaagaag 120
tttctggatg acatcaagaa gctacaggaa aacctcaaga agaccctgga caatgtggcc 180
attgtagagg aggagaagat ggaagcagtg cccgacgtag agcgcaagga ggacaagccc 240
gaggggcagt cacctgtgaa ggctgagtgg cccagcgaaa ccccgggtgct gtgccagcag 300
tgtggcggca agcctggcgt caccttcacc agcgccaagg gcgaggtctt ctccgtactg 360
gagtttgcac cctcaaatca ttcttttaag aaaattgagt tccagcctcc agaagccaag 420
aagttcttca gcacagtgcg gaaggagatg gcgctgctgg ctacctcact gcctgagggc 480
atcatggctc agacttttga agatagaatg gacctcttct cagctctcat caggggcccc 540
```

actcgaaccc cctacgaaga tggcctctac ttgtttgaca tccagctccc caacatctac 600
ccagccgtgc cccccactt ctgctactct cccaatgcan tggncgcctg aanccccacc 660
tgttt 665

<210> 2928

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2928

gctgcgggcc cgggccatgg ccgccgccga tgccgagaga cacctatggc tgccgatgaa 60
ggctcagcag agaaacaggc aggagaggcc cacatggctg cggacgggtga gaccaatggg 120
tcttgtgaaa acagcgatgc cagcagtcac gcaaagtctg caaagcacac tcaggacagc 180
gcaagggtca acccccagga tggcaccaac aactaactc ggatagcgga aaatgggggtt 240
tcagaaagag actcagaagc ggcgaagcaa aaccacgtca ctgccgacga ctttgtgcag 300
acttctgtca tcggcagcaa cggatacatc ttaaataagc cggccctaca ggcacagccc 360
ttgaggacta ccagcactct ggctctcttg ctgcctggcc atgctgcaaa aacccttcct 420
ggangggctg gcaaaggcag gactccaagc gcttttcccc agacgccagc cgccccacca 480
nccacccttg gggganggga nttctgacac ana 513

<210> 2929

<211> 668

<212> DNA

<213> Homo sapiens

<400> 2929

gctgggtccc ttctcccttg acagctccct ttctgtgttt tttctggcac aagaaactct 60
gtcatcttgt ataaatanga naaatattatg gcagttttcc ctcttcttct ccctgggtggg 120
ctactaggaa gggcttaggg ggangaggga gcctgaaatt ccaaaaatat aaatgtggaa 180

agactggagg gggtcganga gtctctttgc ctgccttagc tctggcccca gctctccttt 240
 ccctttgcat gtttgaccat ctgggtgatg aggagggtan agaactgggtg cagcccgtcc 300
 tctctgcaag cccaaaagag atgggtccca aagcagatat ccgacaggag gggcacaagg 360
 gaaatcaagg aaataggctt ggctgtccca tgaaataatt gganganaca cagaccactg 420
 ccctccttcc tggatttggc tatttttgta cttccctgtt tgttgangca gcctgataca 480
 gcggggaana naactcgtcc tcgatttana aagattgaca ganaaactaa gtgtgtgacc 540
 ttaagcaagt catatcttgt ctccgggcct cacctgtaaa aaganggaag ggactgaatt 600
 tatcnngggt tttcaaatga ttttaactct ggggtccttc cttcaaataa aaccgtntgc 660
 nctgaccc 668

<210> 2930

<211> 837

<212> DNA

<213> Homo sapiens

<400> 2930

ctaatacatc taatgacagt aggcatcaaa agctaaaaga gatttcacaa tactacatac 60
 catggagaca gggctgataa attatggccc atgctgtctg gttttgtacg taaagtttta 120
 ttggaacaca cctgtgtcca ttctttcatg tattgtctat ggctgctgtc atgttacaac 180
 tacagagttg agtagttgca acaganacta tatggccctt gaccaaaaaa agcctgccaa 240
 cccctgccat gggacatatt cttcagggtc cttttcttaa aaatatgtat aacaactctt 300
 aataatttat tggtcagtg attcccaaat tatgttttat agaatatata tattctctaa 360
 gttaataaat gttttgagaa aatgattgat gctaatttg gtttttcttt atggttgatt 420
 ttaatatgtt tatttaaata tgagattaag actgctaaac tcatttctat agcttttatt 480
 tttatgtgat aatctacctt taagaaaagg tgtaccatac ctgagancac caggaagtcg 540
 catgaganat cacctgatac atgaacgtat gatgttccat ctgcgcattg atgaatancg 600
 agcatttaca aattaactga tgtgttgctg tatatcatct ctttgangan tgccctcttc 660
 ttgtatcccg tcttaataat ttacacatt tgcgatactc aatgtctatc ctaaattaac 720
 catgttttgt acccaaactc ntgggccat gggatctgtt gctgaaacaa aggaaatctt 780

aaacaaaaaa atngaaactt ccggttanca aaattggtgt ctgaatccaa ntgatcn 837

<210> 2931

<211> 520

<212> DNA

<213> Homo sapiens

<400> 2931

ggacatatat tgagtgttac tttatgccag accctgggct ggcagctgtt tggaggcaaa 60
 gatgtatgag gccatctcag gaganactac ttgttaggat tcttgagttt tgaccaacag 120
 aaatgaactt ggaccaactt aagcaaggaa aaagcgttca tgggaaggat gctgggatag 180
 ctcacaaaac caaaagaata nctgaacaat taattggcct tgggaagggt gggagctggg 240
 gcaactacga ngcttgccct ccagganctg ctgcggttgg canatcaaca ccaacttgcc 300
 attggttcta gtgggtcccc ttccactcaa gattcaaatt ccaagtgaag gaacctggcc 360
 tggagctcag ggcttcatag agtgggaggg gggcantctt ccaaaagatg cggactcttg 420
 ccacatggaa tgggtgganta cggaagggtg gaaagggttt ggtangtnaa ccctgaanat 480
 gcttctaaca cacgttctgt tctcccatct cacgtatgac 520

<210> 2932

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2932

agcgaataaa tgctcagaaa ggcgttttgt ttcaagagga tcagattttg gactggtttg 60
 tacagatatg ttggccctg aaacatgtac atgatagaaa aattcttcat cgagacatta 120
 aatctcagaa catattttta actaaagatg gaacagtaca acttggagat ttggaattg 180
 ctagagttct taatagtact gtagagctgg ctggaacttg catagggacc ccatactact 240
 tgtcacctga aatctgtgaa aacaaacctt acaataataa aagtgacatt tgggctcttg 300

ggtgtgtcct ttatgagctg tgtacactta aacatgcttt tgaagctggc agtatgaaaa 360
 acctgggtact gaagataata tctggatctt ttccacctgt gtctttgcat taticctatg 420
 atctccgcag tttggtgtct cagttattta aaagaaatcc tagggataga ccatcagtca 480
 actccatatt ggagaaaggt tttatagcca aacgcattga aaagtttctc tctcctcagc 540
 ttattgcaga agaattttgt ctaaaaacat tttcgaagtt tggatcacag cctataccag 600
 ctaaaaaacc agcttcanga caaaactcna tttctgttat gcctgctcaa aaaattacaa 660
 gcctgccgct aaatatggaa taccttttagc atattaagaa atatgganat taaaaaatta 720
 ccnaaaaaag aaaccactgc caaaacntaa accnggccct ccaactccca aaaaaaaaaa 780
 ttgaattctg gganaaaaaa agggaggaaa atttctgaag naacccccca gaaaanaaaa 840
 aaggggggaa ntttttgaaa aagggaanan aaaccc 876

<210> 2933

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2933

gttgtttctg aggagttcag gaatcagatt gtacgtgaac ttgtgacttt gcctgcaaatt 60
 cgttggaggg agcagttaga ctattacgct cgctgcagcc aggctcctgg ctgtggggaa 120
 ctctcttttg aactgacac ttggagcttg cagataagga agacaggggc tcagacagct 180
 actgactttc ctcatgctat caggatatgg taaaaacta aacctgaagg gcgatcggtt 240
 acatggacct cagaccagag tggcaggcca tgtgtttata ctgtgggatc tcccataaac 300
 aacaggggccc tttttccatg ccaggagcca cccgttgcca tgtcaacatg gcaggctaca 360
 gttcgagcag ctgcatcttt tgttgtttta atgagtgggg aaaattctgc caaaccaacg 420
 cagctttggg aagaatgctc aagctggtat tactatgtaa ctatgccaat gccagcctcc 480
 accttcacaa ttgcantggg atgctggacn gaaatnaana tggagacatg gtcctcaaat 540
 gatttggcaa cngagaaacc ttctcacctt ctgaagccaa ctcca 585

<210> 2934

<211> 538

<212> DNA

<213> Homo sapiens

<400> 2934

```
aatcgcagcg ctggcgcggg cggaggctaa aacacggggg tcctgagact gaggaaaacg 60
cgccaagttc ccctcgggtg cggagtgcta aagaccctan cggttcatgc gttcggcgag 120
cggggccgct gcttggtgcg ctcttggtc tcccggggcg ggcgcagatg ggcgccgctc 180
ccgggatgta tttggtgttg gtgcaaggcg ggagcgagcg gcggtcgggg ttcccgtctt 240
tgggagcgga tggtcactcc cccgcgggga gggcgagccg accanatttt cctggggccg 300
gggaccgggc gggctcgggg cagggactca cctgtcgac ccacactcat tcgggttgga 360
cttgccggcg tcaccgccgc ggacttcgct ttgggccatg accanatata attggtgatt 420
acaactttcc tctataaatt aactcttgac actccttggg atttgaanaa aaaaatgcct 480
ggtgtcatac ctagtgaaan taatggactt tcaangtn gcccttcaaa naaaaaca 538
```

<210> 2935

<211> 610

<212> DNA

<213> Homo sapiens

<400> 2935

```
tcactgggga aatacaaaaa tagccccctcc tgaagataaa atcattcaga aacagagcaa 60
taattctgac tcattaactt ctacctactc aaaaaagtct gccatgatga tggaccgaag 120
tgaggctttt taaccacaaa gtaacctttt tatttttttg agacagtctt gctctgtctg 180
tcaccaggc tggagtacag tggcatgac ttggctcact gcagcctcga cttcctgggc 240
tcaaagtac ctccacctc agcctcccat gtggctggaa ccacaggcac gtgccaccat 300
gcctggctat tttttgttg agctgggctc tcgctttgtt gccaggctg gtcttgaact 360
cctcggctca agcaatcctt cccactcagc ctctgtagt gtcganaata taggcgtggg 420
ctactacacc tgcttcagcc gcttctataa aaccgctgac ctgtgtgtgg angacagcca 480
```

ngtgtgtgct cactgcgctg cgaaaatgtt ttgtcacgtg actttccccg gatttccatt 540
tctttttttc tgcttcctc cnaaactaat anaaanactg ggtgcggggg ctcacgcctc 600
taatcncanc 610

<210> 2936

<211> 783

<212> DNA

<213> Homo sapiens

<400> 2936

gaattcagtg gccaaaggag tatttttggg gtgccttgag ccatatattt taagtataa 60
attggtggga atcacacccc aagtaatgaa agacttgatt gttcatttcc aagataaaaa 120
attaatggaa aatgtggaag cgctcattgt acatatggat atcaccagcc tagatattca 180
gcaggtagtt ctcatgtgtt gggaaaatcg tttatatgat gctatgatct atgtctacaa 240
cagaggcatg aatgaattta ttagtccaat ggagaaactt ttcagagtca ttgctcctcc 300
tctgaatgca ggaaaaacac taacagatga acaagttgtt atgggcaata agtccttgt 360
atatatttagc tgttgtctag caggctgtgc ctatcccctt ggtgacatcc ctgaagatct 420
ggttcccttg gttaaaaacc aggtttttga atttctaatt cgcctgcatt catcagangc 480
ttctcctgaa ggaaaaaatc tacccttaca ttcggacttt gctacatttt gacacaagan 540
aatttctcaa tgtnttggca ctgacttttg aagattttta aaatgacaag caagctgtgg 600
gaatatccac agccgaattg tggatatattt gttgaaagtt atgggtggan aattcagact 660
ttacccctc acaagttna tgtctcttta ccttccttgn tccgcagctt gcaaacctg 720
acaacacctt gtttgtaaaa canaaacctt tttgatcng gtccttgaaa tcccttgntg 780
tcc 783

<210> 2937

<211> 720

<212> DNA

<213> Homo sapiens

<400> 2937

```

aggaagagga taaaagccag atctcctttg ataacctcac tccaagtggg acgctgggga 60
aagactacca taagtcagtg gaggtttttc ccttaaaggc aagaaaatct atggaaagag 120
aaggctacga gtcctcgggc aatgatgact acaggggtag ttacaacacc gtgctctcac 180
agcctttatt tgaaaagcag gacagagaag gtccagcctc cacgggaagc aaactcacca 240
ttcaggaaca tctgtacccc gcgccttcat cacctgagaa agaacagctg ctggaccgca 300
gaccactga atgtatgatg tcgcgatcag tagatcacct cgagagacct acgtccttcc 360
cacggccccg ccagttaatc tgctgcagtt ctgtcgacca ggtcaatgac agcgtttaca 420
ggaaagtact gcctgccttg gtcaccccg ctcattatat gaaactcccc ggggaccact 480
cctatgtcag ccagcccctc gtcgtcccg ctgatcagca gcttgagata aaaagactac 540
aggctgagct gtccaatccc catgccggga tcttcccaca cccgtcctca cagatccagc 600
cccagcccct gtcttcccag gccatctctc ancancacct gcaggatgcg ggcacccggg 660
aatggaaccc tcanaacgca tccatgtcgg antctctctc catcccanct tccctgaaac 720

```

<210> 2938

<211> 544

<212> DNA

<213> Homo sapiens

<400> 2938

```

aaaaatggag attctccagg gacccttccg tatctgccta ggcattttgc tgtctcctcc 60
taatacgtg ttgctgtact ggacacttgc tcccatctac tctcttctct ggaatccacg 120
ggggattcct aaggatgtca ccacagtgtt ggccagatgc acaggtcaca ggggactgaa 180
cctcatcacc ccacaaacat accattcagg ttttgccaag aatgacactg taaatgtaac 240
aaagcttctg tgcttgtag tgaacaccaa ctcagctcct ctctgtatt cagaaatcag 300
gatgagatga aaacaacaag caggccaggc acggtggctc atgcctgtaa tcccancact 360
ttgggangcc gaggcgggcg gatcacctga ggtcgggagc tcgagaccac cctgatcaaa 420
acaganaaac cccatctcta ctgaaaatac aaaattagcc aggcgtggtg gcaaatgcct 480

```

gtnataccan ctactcagga nctgaggcag gaaaattgct tgaacccggg angtggangc 540
tgca 544

<210> 2939

<211> 821

<212> DNA

<213> Homo sapiens

<400> 2939

tctatTTTTT ggctattata aacaatgctg ccgtgnaaca tttgtgtcca actTTTTgtg 60
tggacacgtt ttcatttctc ttggatacac actagcagtg gaattgctgg gtcatacagt 120
aactctatgt tactTTTTga agaaatgcc aacagtttcc caaagtggct gcaccatttt 180
acattcccac cagcatatat gagggttcta gtttctccac atcatctcta atacttgttg 240
ttgtttatct ttttgattat agccatccta gtaagtttga agangtatct cactgtgggt 300
ttgatttgca atttccaaac catttgatga caaatgatgt taagcatctt ttcattgcaca 360
tattttcttt ggaggtttgc ctattcaggt cttttgccca ttttaaaatt gggtttatct 420
tttttttttt ttganatgga ntctcgctct gtcaccaag cangantgca atggtgcaat 480
ctcggtcac tgcaacctcc gcctcccagg ttcaagtgat tctctgccc canctcctg 540
antancctga ttacaggtgc ccaccactac actggctaatt tttgtattt ttagtaaana 600
cgggtcttan catgttgccc aagctggtct tgaactcctg aactcaggtg atccaccac 660
cttggccttt ccaaantgtt gggattacag gcatnaacca ctgccccggg tggggttatg 720
tttttatatt gaattgtagg aatactttta tcnttttaac taaaaattct ttatcctttt 780
agcttaccan ctncattnat ttggcaaaaa tttcctcccc a 821

<210> 2940

<211> 768

<212> DNA

<213> Homo sapiens

<400> 2940

```
gtctttctct gtctcggctg aggcancat ctttctcttg ccgcgtgctg gtgttgagg 60
accctccctg cttcagggtg cagctcgcag aaagaagaag gtggtacata gaacagccac 120
agctgatgac aaaaagcttc agagtctctt aaaaaactg gctgtgaata atatagctgg 180
tattgaagag gtgaacatga ttaaagatga tgggacagtt attcatttca acaatcccaa 240
agtccaagct tccctttctg ctaatacctt tgcaattact ggtcatgcag aagccaaacc 300
aatcacagaa atgcttcttg gaataattaag tcagcttggt gctgacagtt taacaagcct 360
taggaagtta gctgaacagt tcccacggca agtcttggtg agtaaagcac caaaaccaga 420
agacattgat gaggaagatg atgatgttcc agatcttgta naaaattttg atgaggcatc 480
aaagaatgaa gctaactaaa agtttggttt ttggaagctg gcatggacta nattaacaa 540
atcagctatg tggttccnaa gttttacaga catggagaac atcacctgtt actaattcag 600
taatataaat attttgtata ttaataatgc tgtttgttca ncatttttcg gtcatttgat 660
tttgcathtt gcacttcctc ccangatatt tttttggtcc aaatatnaaa tattggtgca 720
ttttgaaggg tgttttgggt tttgaattcc cgggttttnn tggtttttn 768
```

<210> 2941

<211> 678

<212> DNA

<213> Homo sapiens

<400> 2941

```
aagccttcag ggatttgcct gtggttgcta ctcaagttaa aaagactggg agcctgcatt 60
gtttggtcct ggagctcaag gttttcagtg aaggcttgct ctggcacctc tgggcattcc 120
ttttcattac tggttgagca tccttccttc tgctctgtca attggcaaaa tatgctggag 180
cacattctgg actagcagtt gccttggggg agtcaggctg ggtatttggt tggatatctt 240
tggtgtagca gaccccgaa tctcatggca attaggattt ggtggctaaa cgaaagagtt 300
agtgaagga aaagcctagt tggaatttct gagtctgggc catccttaag ctgctgtcta 360
ctgcctgaat gggaagtaat gtcgaattgg aaaattagct caccattttt gttctagctt 420
tgcagacatt tattcctctg atgataggct gagaaatgcc taggccggct taaaaggcac 480
```

acagcatgac agaagtactc cttcaaagca gctgtgtcta gaaagaagaa ctggaaaagt 540
 ggatttgctg gggaattaaa tgcathtagt tttccactta cgcacaactg ccttctccan 600
 tatatcatat caaggttttt taagcctttg tngcttacc tgcaagaaca tactgttntc 660
 ctgttgttct ggactgtt 678

<210> 2942

<211> 609

<212> DNA

<213> Homo sapiens

<400> 2942

attcagttct cgagctccag ccctcagcgc atgcgcaaga cgagtcgcct gagggaaactg 60
 atctcagctc gggcccgcgt tacatcctcc tcctcttctt ccttcggccc agctttcctt 120
 aggggctgca acccggacgc cgaggccggt ttcggagtgg ggagtgccca ttttctctcc 180
 ttcccacgtt cctggccccc agacgccatt tgcaggcggg tggcttgggt cagcctcccc 240
 gccccacccc gactcccgtc acgggagagc gcacaccgcg ccccgagaac caatcagcag 300
 ccgcgttagg taaccatgtc tgagtctgga cacagtcagc ctggactcta tgggatagag 360
 cggcggcgac ggtggaagga ncctggctct ggtggccccc anaatctctc tgggcctggt 420
 ggtcgggana gggactacat tgcaccatgg gaaagagaga gaagggatgc cagcgaagan 480
 acaagcactt ccgtcatgca gaaaacccca tcctctctc aaaacctcca ncanaacggt 540
 caaaacagcc nccacctcca acanccctg ctgccccgcc tgctccaccc ctctgggaaa 600
 aaccatcn 609

<210> 2943

<211> 648

<212> DNA

<213> Homo sapiens

<400> 2943

actcaatgga gccctcaagg tagaactcct cggaaccaag acccagctca tccagacaag 60
 cccaagaaac attctcccaa aaggaggctg cagcatgccc tggaggacca gatctataga 120
 atcttccgga agagtcgtgt cttgactaat cagagcatca actgcctctt tactgtgcct 180
 gccaaccaag ctttcgtgta catagtaccg ggaagccagg aggaggaccc agtaggtatg 240
 ttgctggacc aacttaggag tcattgtact gtgaaggacc cggaatcttt gctgggtgcct 300
 gcaccccttt ctgggcctag gcgataccag gtgatgaggc agcacagccg acaacaactt 360
 tcctttcaca ttgacagcag cagttccagt tcttcaggcc agctagtgga tttcactctt 420
 cgggaattcc tatggcagca tgtggagcta gttctaagca agaaaggttt cgatgacagt 480
 gtgggcagga acccacagcc ttcccatttt gaacttccta cttatcagaa gtggatctca 540
 gcagcttcaa aactgtatga ggtggctatt gatggggaaa gaanaagact tggggtcctc 600
 actggananc taacatctaa nattttaagc agtattaaan tcttgga 648

<210> 2944

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2944

taaagaacga acttttgatc cggagagagt ggagagagag agacgcttaa tacggaagga 60
 aaaagtggaa aaggacaaaa ctgacaagca gaaacgcaa ggaaaggttc actcccctag 120
 ttctcagtct tcagaaacgg accaagaaaa tgagcgagag caaagccctg aaaagcccag 180
 gagttgtaat aaactgagca gagagaaagc tgacaaagag ggaatagcga aaaaccgcct 240
 ggaactcatg ccttgcgtgg ttttgactcg agtgaaagag aaagaggga aggtcnttga 300
 ccacactcct gtggaaaagt tgaaagccaa gcttgataat gacactgtca aatcttctgc 360
 cctggaccag aaacttcagg tctctcagac ggagcctgca aaatctgact tgtctaaact 420
 ggaatcagtt agaatgaaag tnccaaagga aaaggggctt tcaagccatg ttgaagtgg 480
 ggagaaggaa gacaggcttn aagccaggaa gtcctcaag cctganca 528

<210> 2945

<211> 679

<212> DNA

<213> Homo sapiens

<400> 2945

```

aaaaaggaat gggatcgcgc cgcggcgggt cctgtcctta cagttgcgct gccagggga 60
ccgatgttgc gcgaggaaaa tgcgggacgc ccaggtcggg gctcggccca gacttatgcc 120
cgtgttttca cagcccacac tcgtgcccga agccccttac cccgccccgg gctgtggtct 180
gtgggctgtg ggacgagctg cggcgcgggc catttctgan cagtggangt ttcaagtaat 240
ccactaacia ccagttccaa attctgtcat caaatcctgt gctgctgttc ctcgtggtaa 300
tanatgcata ttatttcttt tatttaaaag aaatgaatgt gactantatt gcattaagan 360
ctggaacttg gcttttacct gcatggcatg ttaaagtacc tccgatgtgg ctggaagctt 420
gttttaactg gattcnagaa gaaaataata atgttaactt gantccggcc caaatgaata 480
aacaagtgtt tgaacagtgg ctcccttactg atctgaagga tttggaacat cctcttttac 540
ccgatggcnt tttaaaaatt ccaaaaggaa aaattaaatg gattttatgc tctgcnaatt 600
aatcccttgg ttgatgttag tcacctgcat actcccacaa attcngaant tgaaaaggaa 660
agaattccnc cnatgatct 679

```

<210> 2946

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2946

```

gaccttttag cgtcacgggt ggggctgcag cttctggacc taggactttg aacatgtcgc 60
gcctgaagcg gatagcgggg caggatctcc gcgctggttt caaagcaggt ggaagagact 120
gcggtacctc ggtaccccaa gggctgttga aggcagcgag gaagancggc cagttaaacc 180
tgtcgggtag aaacctcagt gaagtgccgc antgtgtctg gagaataaat gtggatatcc 240
ctgaggaagc taatcaaaat ctttcgtttg gtgctactga aagatggtgg gagcagacan 300

```

atttgaccaa actaatgntn tcaaacaata aacttcagtc acttacagat gacctgcgac 360
tcttgcctgc actgactgtt cttgatatac atgataatca gttgacatcc cttccttctg 420
ctataagaga gctanaaaat cttcagaaac ttaatgtcng ccataataaa ctgaaaatac 480
tccctgaaga aattacnaac ctganaaacc tgaantgcct gtatctcc 528

<210> 2947

<211> 745

<212> DNA

<213> Homo sapiens

<400> 2947

gtgaggcgga agctgtgtat ggcgggaggc tgtggcggtc ccttggtggg gaagctgttg 60
ctgttgctan acgacgggaa ctagctctcg tcacttcctc agcccgccgt ctgcccactc 120
ctctagccgg aacctggggg cccggagccg gggtangcac ananttgtcc tcggaggtcc 180
aggacagcgg ccagcccggc ggcgggagtc agggccacgc cacctgcagg gaagaacccg 240
agtcgaagcg ggaagatggc tgcagacaag cctgcagatc agggagcaga gaaacatgaa 300
ggcacaggtc agtcctctgg gatcactgat caagagaagg agttatccac caatgctttc 360
caagctttca catctggaaa ttatgatgcc tgtctacaac accttgccgt tctacaagat 420
ataaaciaag atgattatna aataattttg aatacagcag tagctgagtt ttttaaaagt 480
aaccaaaacna caacagatta tttagacaa acacttaacc agctnaagaa tcagggtccac 540
tcngctgttg aaagaaatgg atggattaga tgatgttgaa aacagcatgt tgttctataa 600
tcaagnagt cattctttat catctgcggc agtatacana agccataten gttggtgaaa 660
aactttatca gttcntagaa ctttttgaaa aaaaatttgc cccaaccatt gtnntttttg 720
ctttgttaaa cctgttntnt tttta 745

<210> 2948

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2948

```

attttggggg tggttggagg cggtagcggc ggcggcgaga gggaatttcc ttgtgcctcc 60
attcccggga ggggggagcg gcgttggagg ccaccgtttc cagcatcaac aacagcaact 120
tgtgattggc ggtgaccgga tattcagttg cacatcccca catcaatgca ctgccaatgg 180
gttatatcct gtgttgtagc ctcatggttt aagtgggaat aaagatgagt ataagcagtg 240
atgaagtcaa cttcttggtg tatagatact tgcaagagtc aggattttct cattcagcat 300
ttacctttgg tatagaaagc catatcagtc agtccaatat aaatgggtgcc ctgcgtccac 360
ccgctgcatt gatttctatc atccagaaag gtctacagca tgtagaagca gaagttagta 420
ttaatgagga tggtagcttg tttgatggc gaccaataga atctctgtcc ctgataaatg 480
ccgtaatgcc tgatttagtt caaacaagac aacaagctta taaagataac ttgcacagca 540
acaggcanca nctgctgcan ctgcc 565

```

<210> 2949

<211> 559

<212> DNA

<213> Homo sapiens

<400> 2949

```

taaacagcaa tatgatattg agataacaag aataaaaatt gaattggagg aagccctagt 60
caatgtgaaa agctcccagt ttaagttaga aactgctgaa aaggaaaacc agatattggg 120
gataacatta cgtcagcgtg atgctgaggt gactcgacta agagaattaa ccagaacttt 180
acagactagc atggcaaagc ttctctccga tcttagtgtg gacagtgtc gctgcaagcc 240
tggaataaac cttaccaaatt cactcttgaa cattcatgat aaacaacttc aacatgaccc 300
agctcctgct cacacttcca taatgagcta tctnaataag ttagaaacaa attacagttt 360
tacacattca gagccacttt ctacaattaa aaatgaggaa accatagagc cngacaaaac 420
ctatgaaaat gttctgtcct ccagangccc tcaaaatatt aacactaggg gcatggagga 480
aagcatctgc ccctggaatt atttctgccc tttcnaancn ggattctgat gaagggagtg 540
aactatggct ttantanaa 559

```

<210> 2950

<211> 557

<212> DNA

<213> Homo sapiens

<400> 2950

```

gctcgggcgc ggggcgttct tgggtgcgccg ggccgtggtg agtccgggct cccgtggccg 60
cgtgctggga ggagactgga gcccggttag gaagaatgga gttggcgact cgctaccaga 120
tccctaaaga agtggctgac atctttaacg cccccagtga tgataaagag tttgttggt 180
tccgagatga tgttcccatg gaaaccctct cgtcagagga gagctgcgat agttttgact 240
cactagagtc agggaaacag caggatgtgc gctttcattc caaatacttc acagaagagc 300
taagaagaat ttttatagag gacactgact cagagactga ggattttgca ggatttacgc 360
agagtgatct gaatggaaag actaaccag aagtaatggt cgtggagtca gatttgagt 420
atgatggcaa agcatctttg gtgagcgagg aagaggaaga tgaagaagaa gatgggctgc 480
ccctagaaga agcggctctag aagaagtagt atggtcttcg agtaccttcc ttcccncca 540
naactggcca cnaacca 557

```

<210> 2951

<211> 557

<212> DNA

<213> Homo sapiens

<400> 2951

```

actgagggtg gtggagcagg tagatggaaa gaatctcttc ccaaagacaa gccgcagaac 60
gcatcccttc cccagcccct gtgttaggcc gtgaggcatc ttcctgccag cctgcaccag 120
ggctttcagg ttttgttgct tagcacatcc agggtcatgc acttcaggac aagccacctg 180
atgcccctcg gccccccagt cctgcagcct cgctggagct ctccctgcag caggaagggc 240
tgaggccaac cacaaagggg cttggggcca catcaaggga tggcagaacg agagggaagt 300

```

gcagggagcc tggcccaaaa aaccaaccct gccgccgcct cctggaagg gcacacctcc 360
 tgagctaagc ccaggatacc gccaagcct cggggcctcc caaggtgtcc cccatgccag 420
 aatgtgtggc ctctgccaga cccaggtggc tccaggtggt ttgactccca tttcctctcc 480
 ccttcccagg tctttcccaa gccagaccc cctgttttta attttcccct gttggggana 540
 aaagaaaatn tgccnca 557

<210> 2952

<211> 710

<212> DNA

<213> Homo sapiens

<400> 2952

ggaaagagt ganattggag aattggaaga ggctagatgt caatcaggct gatattgcac 60
 cattgatgac ttcccttatt ggagttccct ttctcttaa ctcagtggga atccttcctg 120
 tggattatct taacaacact gatctcttca aagcagagag catgtttaca aatgcagtac 180
 agattcttga acagttcaag gtgaaaatga ctcagaagaa agaagttact ttaccatfff 240
 tgtttacacc atttaaactg ctttctgatt ccaaacagtt caacatttta agaaaagcaa 300
 gatcttatat aaaacacaga aagtttgatg aagtggcttc cctttgcaag gagctaattc 360
 ntcttgcat gaaaggattg tcctattatc acacatatga cagattcttt ttgggcgtca 420
 atgttggtat tggttttgtg ggatggatat cttatgcctc tttattgatc atcaagtctc 480
 attccaacct tataaaagggt gttingtaaag aagtgaagaa accaagccat ctctgcctt 540
 gtagttttgt acctattggc attttantan cattttttct gctgattcca gcctgtcctt 600
 ggacatatta tgtatatggt ttgttgccnc tgcccatatg gtttgcngrt ctaaaaaaat 660
 tcangttntt ccggaacttg ttgtttcagt gttgaactat cctctgancc 710

<210> 2953

<211> 519

<212> DNA

<213> Homo sapiens

<400> 2953

```

aggcgcagtt tgccggccgc catcgcgcac tggggctccg ggcggctggg acggcctggg 60
gtagctgcgc agcaggtctg tgggttctgg caccacctga gccactggg catctgggtca 120
tccctggcac ctctcctttg gagccacctt gtccctggct agacagtcac attttccagt 180
gccgttttgg aaagatgttg cttttggana aggcgtttgc ctccccaag anctccccag 240
ccccgccgga tctgccacg ccgggggtcag cagccggant ccagcaggaa gaaccgana 300
ccatccctga aaagaccct gctgacctgg anttctcccg cctgcgtttc cgggaatttg 360
tctaccaaga agctgccggg cccacacaaa ccctggccc gctgcntgaa ctgtgccgcc 420
agtggctgat gcctgaagcg cgctccaang aacanatnct ggaactgctg gtgctggaac 480
anttcttggg catcctgcct gataangtcc ggcctgggt 519

```

<210> 2954

<211> 684

<212> DNA

<213> Homo sapiens

<400> 2954

```

gactgcgcca cntctgaggc ggctgtggcc acgtctgaag cggctgtggc cgcgtcgggtg 60
tccgcgtcga ggagccgggg cagggcacga tggcggactg ggctcgggct cagagcccgg 120
gcgctgtgga agagattcta gaccgggaga acaagcgaat ggctgacagc ctggcctcca 180
aagtcaccag gctcaaatcg ctgccctgg acatcgatag ggatgcagag gatcagaacc 240
ggtacctgga tggcatggac tcggatttca caagcatgac cagcctgctt acagggagcg 300
tgaagcgctt ttccacaatg gcaagggtccg gacaagacaa ccggaagctt ctatgtggca 360
tggccgtggg tctaattgtg gccttcttca tcctctccta cttcttgtcc agggcaagga 420
cgtgagccan tgggagctgg tgtctgtggg tgccaanggc agccagggtc ttccctgcct 480
ggtgttttgg gctccanaag acttacctac aaaatactcc ttgcaatta taattgtggg 540
tcaggaatct tcttctgtg tggcangaag ctgcnctgc ctgtgacctg atnanctcat 600
gttggctggg cccatgtgtg aaagggacct ctcggggaaa ccaaggccca nccctcccc 660

```

cctcccccaa gtncctanaaa acca

684

<210> 2955

<211> 780

<212> DNA

<213> Homo sapiens

<400> 2955

tttagccag cccatgaagc aagcttgaggc aacagatgat gtagctcaga tttatgataa 60
 gtgtattaca gaactggagc aacatctaca tgccatccca ccaactttgg ccatgaaccc 120
 tcaagctcag gctcttcgaa gtctcttgga ggtttagatt ttatctcgaa actctcggga 180
 tgccatagct gctcttgat tgctccaaaa ggctgtagag ggcttactan atgccacaag 240
 tgggtgctgat gctgacctc tgctgcgcta cagggaatgc cacctcttgg tcctaaaagc 300
 tctgcaggat gggcgggcat atgggtctcc atgggtgcaac aaacagatca caaggtgcct 360
 aattgaatgt cgagatgaat ataaatataa tgtggangct gtggagctgc taattcgcaa 420
 tcatttggtt aatatgcagc agtatgatct tcacctagcg cagtcaatgg anaatggctt 480
 aaactacatg gctgtggcat ttgctatgca nttagtaaaa atcctgctgg tggatgaaaa 540
 gantgttgct catgttactg angcagatct gttccacacc attgaaaccc tcatgaagat 600
 taatgctcat tccaaaagca atgctccaaa angattgccc cactgatgga antantgcna 660
 tccaactatg aagcaatgat tgatcgtgct catggaagcc caaactttat gaatgcattc 720
 ctggggatct ctccancccc caaaatttna ttaaccnccc aagnctgaa nggaaaaaag 780

<210> 2956

<211> 659

<212> DNA

<213> Homo sapiens

<400> 2956

cttccccgct tgagttcaac aagaactccc tcaccttctc cattccacca aagaacaagg 60

cccggctcaa gaagatcaag gatgacactg gaccagtggc caaaaagccc tcttctggca 120
 aaaagggggc tacgacacag aactctgaga ttgctcagg ccaggccccc actcccgacc 180
 agccagacac ctccaagcgt tcaaagtga ggccgtgcag agctgggtcac tgaaatgagc 240
 ctgataggat aggctggagc ataaaactct gcaagggctc ctctatcctg tggctctgag 300
 ctgtgtgccc ttctcagtct gaggggccta acctagagca ggtttcatag tgagaaaatt 360
 caatgtagca gactactgaa aaactactgt gttgctcagg ctttgtttga ggtcctgtat 420
 atacagcact gaaaagagag ataaagtccc tgcctgcatg cattctggcg gaagagacaa 480
 gcaagcaatg aacaaattag cagaaaacct aatttttagtg aaaaatgctg taaagaaaat 540
 agaaatgcga tagagttgct ggcaggctaa tgtaaataag tggctctgaaa aggtgtctct 600
 gaaccgaagg catgtgagct tggggcctaa acaacttana aanggaaaaa aaccccntt 659

<210> 2957

<211> 659

<212> DNA

<213> Homo sapiens

<400> 2957

ttttgtnttc tgaanattca acaaagctct ttgtagcatc aaatcaagga gctctgcata 60
 ttgttcagct gtcaggagga agcttcaagc acctgcatgc tttccagcct cagtcaggaa 120
 cagtggaggc catgtgtctt ttggcagtca gtccagatgg gaattggcta gctgcatcag 180
 gtaccagtgc tggagtccat gtctacaacg taaaacagct aaagcttcac tgcacgggtgc 240
 ctgcttaciaa tttcccantg actgctatgg ctattgcccc caataccaac aaccttgtca 300
 tcgctcattc ggaccagcag gtatttgagt acagcatccc anacaaacag tatacagatt 360
 ggagccggac tgtccanaan cagggtttc accacctttg gctccaaagg gatactccta 420
 tcacacacat cagttttcat cccaagagac cgatgcacat ccttctccat gatgcctaca 480
 tgttctgcat cattgacaag tcattgggtga gttcttctact gctacctccc aaatcttctt 540
 ctgaatctta aagttctaaa agcaacaagt acnatnaggt tagaagacag agactcagaa 600
 tnaaggttgc tagtaaata naatacaggt tggctantac tttcttggaa gaaaagggc 659

<210> 2958

<211> 593

<212> DNA

<213> Homo sapiens

<400> 2958

```
tcaaagtat ctttaccagg acccggcctc tcagttccaa gacccttaca gcctgaatat 60
gtagcccttc ccagtgaaga gtcacatgtc caccaggaac caagtaagag aattccttct 120
tggagtggtc gccaatctg gatggaaaag atggtaatgt gcagagtga agttccacac 180
acatttgctg ttcactctta caccgtccc acgatatgtc agtactgcaa gcggttactg 240
aaaggcctct ttcgccaagg aatgcagtgt aaagattgca aattcaactg ccataaacgc 300
tgtgcatcaa aagtaccaag agactgcctt ggagagggtta ctttcaatgg agaaccttcc 360
agtctgggaa cagatacaga tataccaatg gatattgaca ataatgacat aaatngtgat 420
agtagtcggg gtttgatga cacagaagag ccatcacccc cagaagataa gatgttcttc 480
ttgatccat ctgatctcga tgtggaanaga gatgaagaag ccgttnaaac aatcagtcca 540
tcaacaagca ataatatcc gctnatgagg gttgttcaat ccactnngca cac 593
```

<210> 2959

<211> 510

<212> DNA

<213> Homo sapiens

<400> 2959

```
tgagccctgc agccagccct ctggggacag atccctccaa accaccagtc cccagtcgt 60
ggccccctgga aatgagaacg gcctggcagt gcctgtgccc ctgcggaagt cccgaccgt 120
gtcaatggat gccagaattc aggtagccca ggagaagcaa gttgctgagc aggggtgggga 180
cctcagccca gcagccaaca gatctcaaaa ggccagccag agccggccca acagcagcgc 240
cctggagacc ttgggtgggg agaagctggc caatggcagc ctggagccac ctgcccaggc 300
agctccaggg ccttccaaga gggactcgga ctgcagcagc ctctgcacct ctgagagcat 360
```

ggactatggt accaatctct ccaactgacct gtcgctgaac aaagagatgg gctctctgtc 420
catcaaggac ccgaaactgt tcnaaanaac cctcaagcgg acacgcaa at ttgtggtgga 480
tggtgtggag gtgaacatca ccacctccna 510

<210> 2960

<211> 626

<212> DNA

<213> Homo sapiens

<400> 2960

gaaagaacca aagcaa acat taaaagaagt tcagactgtt acctctattc aaaaagcaag 60
aaaagtatat tggtttgaga aatttctgtg gctcattagc tcagagaact atctaattat 120
aggtggacga gatcagcaac aga atgaaat aattgtgaaa agatacttga caccaggaga 180
catttatgta catgctgac ttcattggagc tactagctgt gtaattaaga atccaacagg 240
agaacccatc cccccacgga ccttgactga agctggcaca atggcacttt gctacagtgc 300
tgcttgggat gcacgagtta tcactagtgc ttggtgggtg taccatcatc aggtatctaa 360
aacagcacca actggagaat atttgacaac aggaagcttc atgatnagag gaaaaaagaa 420
ttttcttcct ccctcatatc tnatgatggg gtttagcttc ctttttaagg tagatgagtc 480
ttgtgtttgg agacatcagg gtgaacgaaa agtcagagta caggatgaag acatggagac 540
actggcaagt tgtacnagt aactcatatc agaagaaatg gaacaattag atggagggtga 600
cncgagcagt gatnangatn aagaaa 626

<210> 2961

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2961

tagacnaagg aaaatgcaaa aagcgaggcg acggcttaaa gatggagaac gacccccagg 60

gaggcggagt ctgaaatggc cctggatgct gaggttcctgg acgtgtacaa gaactgcaac 120
 ggggtgggtca tgatgttcga cattaccaag cagtggacct tcaattacat tctccgggag 180
 cttccaaaag tgcccacca cgtgccagtg tgcgtgctgg gaaactaccg ggacatgggc 240
 gagcaccgag tcatcctgcc ggacgacgtg cgtgacttca tcgacaacct ggacagacct 300
 ccagggttcct cctacttccg ctatgctgag tcttccatga agaacagctt cggcctaaag 360
 taccttcata agttcttcaa tatccattt ttgcagcttc agaggagagac gctgttgagg 420
 cagctggaga cgaaccant ggacatggac gccacgctgg gangagctgt cgggtgcanca 480
 ngagacggan gaccagaact acggcatctt cctgga 516

<210> 2962

<211> 581

<212> DNA

<213> Homo sapiens

<400> 2962

agtgcggcgg cgccgcctct gctctcagt ccccgatcg gaggccgtcc atcgccctc 60
 gggccgacgc catgaagatc aaagatgcca agaaaccctc tttcccatgg tttggcatgg 120
 acattggggg aactctagta aagctctcgt actttgaacc tattgatatc acagcagagg 180
 aagagcaaga agaagttgag agtttaaaaa gtattcgaa atatttgact tctaactgg 240
 catatggatc caccggcatt cgggatgtnc accttgaact gaaagattta acactttttg 300
 gccgaagagg gaacttgac tttatcaggt ttccaacca ggacctgcct acttttatcc 360
 aaatgggaag agataaaaac ttctcaacat tgcagacgtt gctatgtgct acaggaggtg 420
 gtgcttaca gtttgaaaaa gattttcgca caattggaaa cctccacctg cacaactgg 480
 atnaacttga ctgccttgta aagggttgc tgtatataga ctctgtcagt ttcnatggac 540
 aagccnagt ctattatatt gctnatgcct canaacctga a 581

<210> 2963

<211> 740

<212> DNA

<213> Homo sapiens

<400> 2963

```

agccctccct tgcacgttcc ggctcctcct ctatcttcac gccacgcta ggccctgagc 60
ccacctctac gtctcgccgc caactccaca tcctggctcc tatctctgcc ttccaggcat 120
ctcccagctg cacgctcggg cccggctcan anccctaage cctgcctccc ggtcctggcc 180
gggtttccca naactgcacg gcgcctctcc gccaggccc aagcgcgagc cctcctcca 240
caccgagtc ccagccccgc gtcccggatt cggacccgcc tgcctggggc ggtgctgcac 300
caggtagcggg tgtggcaggc gtctcggaac gccaggtgca gcttcctgat caanatggtc 360
gccgcctgcc gctcggtagc cgggctcctg ccacgccgcc gccgctgctt tccgccccgg 420
gccccgctgc tgcgcgtcgc cctctgcctc ctgtgctgga ccccgggcgc tgtgcgcgcg 480
gtccctganc tcgggctctg gttananaca gtcaacgaca aatcaggacc tttgatattt 540
angaaaacta tgtttaactc tacagatata aagttatctg ttaagtcatt ccattgttct 600
gggcctgtta aantttacat agtgtggcat ttgaaatata atacctgtta naatgaacat 660
tcttatctgg aanaaatgtt ccaaaaaaca taaacttant tgtttgaaga aaaantttgt 720
tnattatttg aaaaaatgaa 740

```

<210> 2964

<211> 464

<212> DNA

<213> Homo sapiens

<400> 2964

```

ggcttcaggt ttaaaggcgc gagcgccacc cacgcaggca caagggtcct tagtcgtttt 60
atTTTTtagcg taaggctctc ctctttaaca aggaagtaaa aaaaaaagtt gtgcaataaa 120
tattaatcgt ccttatatgt actcggaac gttcgtcctt taggtttttt cctggcgcac 180
gggcgccgcc aatcatttcg gggcttattt tggttctaaa gcccggggca gccaggcctc 240
cctgcctggc ctcggcgggg acgcgggacc tggggccccg gaccgggcct aaccgccttg 300
gccgggtcccc actgatggtg gcggtcggtc ctgatcgtcc tgatggcagc gaccaagctg 360

```

gactcgggct gtgcacgggc gaagggacaa ggcgggggtga ccccgga aaa cgcctggaaa 420
acgcgtgctt canaaagcgt gggcaccctg tcccctttnc anat 464

<210> 2965

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2965

ttttttaagc aacatcatga attttatcta ctccagaagt ctctacaata gaaaaaaaaag 60
tgcagtgcct ctaggatata aaattcacat tacttttgaa agccaagaag ttggtcttat 120
ccagttaggt cttcttatga agagttttca tccaggggat ataactcctt ggtcagtgat 180
tttattgttt acatcctgag actgtttctac agtttctttg actcctggca ttgaccttaa 240
ggacctatag caagctgttt ctaggatcag aaactcaaga gaggcatttc tctgcttttt 300
cactaaaggt cagttgtttt aatttgaaac ctgaaatgcc tcttttagcaa aagcctgtgg 360
tatggggtna agccatgtaa gaaganaata gtctcagtca catatgaaga ggaaaatttg 420
cagctgccag tgctttcctt gtggccctgc caaccagctc ttccaggacg aactcagtcc 480
agcatgggtt tgatgtaacc atccatgcct ttatttttgt taagtctttt gtgactggga 540
cagttaattt tagtagctga anaacgtcta gttgtttgct tgatatttgt gaacatttac 600
tgcatggatc acaaaacaat ataccctggg ntttcttacn cncacttat atgcnaagg 660
gagtaaagt gttactaaaa ttcgggtagt gcattttgtc cctgaatctg aacctggaaa 720
aatgttacnt taant 735

<210> 2966

<211> 682

<212> DNA

<213> Homo sapiens

<400> 2966

gggaattacc gactctaagt gaaggtcact gacacagaga agcagtatgt gtctggggct 60
 tccaggacct gcaggccac tagcgtgcac ttaccggaat ggcatacaca ggacctgac 120
 atgaggaaga ccaggtttcc agtgtaaact actcttggtc ccaccacctc tggagcactc 180
 agggagcccc atacagtact tacaatgtct ttaatggact tgattctgtt taattttttg 240
 ttttatatta ggcacactgt attaattttc caaaatgtta taccacacta tgttcttggt 300
 cctgacctat tgctctggag gaaagagttg tataagaacg tggctcatgt gaacttttgc 360
 tagcttcatt tgaggacctg agaatcatgg ggaaaggga ggtnatgttt tcattgaaat 420
 catcacagtg atttttattc cctgggaaca cagcgtgtac taaaaataca tgagaaaata 480
 gcatgtatat gaaagctatt ctcaaaagtc acctgagctc accatcttca tagccaaccc 540
 taccagttat aaagatggca gctctatcac ttgattaagt gggangtggt caaatattct 600
 ggggtgcctca ttttcttcat ctgtganatg ggaactgtta tgcctggcctt actaanaatc 660
 ttgtngagan actgaaaaat tt 682

<210> 2967

<211> 640

<212> DNA

<213> Homo sapiens

<400> 2967

gatgtcatct taaaaatcta aaatataaca tggcacataa agccaaaaaa aaattttttt 60
 tttttgagac ggaatcttgc tttgtcgccc aggctatagt gcagtggcac gatctgagct 120
 cactgcaacc ttaacctcct gggttcgggc gattctcctg tctcagcctc ccgagtagct 180
 ggtacgacag gtgcatgcca ccatgcctgg ctaatttttg tgtttttact agagacggca 240
 tttcactatg ttggtcaggc tgggtctcaa ctctgacct caggtgatcc acctacctca 300
 gcctcctaaa gtgctgggat tacaggcatg agccactgtg cccggccaaa gcaaaaaatt 360
 ttaagaaaca cccgattcag taacaatagc tcttaattta gtttatatca ttaaattgtt 420
 tgatcttcat ccttgtttta ggaaacacaa aaaagcntgc acaaanaggc ttataatttt 480
 tatataattt aaaatatttc ttcatttaaa cagaaatgtt ctactctccn ncttttcatg 540
 tgtncatact taccatttct gtgggtgtgt gcataaaatg ttingcatcat ttgatcaatt 600

ttctgttggt gccttggttt atatcantct tcctcnntta 640

<210> 2968

<211> 604

<212> DNA

<213> Homo sapiens

<400> 2968

gcaagatttg ttgcaatgaa atatattaaa tccaattcta aaaattcttc tcatcatttt 60
 gtagagacat ttaacataaa accacaggac ttgcacaaat gcattgccag atgccatttc 120
 gcacgtngca gatttttaca aattttgcaa agacaagatt gtgttaccca aaaatatcag 180
 gaaaatgcac aattatcagt taagcaggtn cgaaacttga gatctgaatg tataggattg 240
 gaaaacaaaa taaagaaaat ggaaccctat gatgaccaca gtaatatgga agaaaaaatt 300
 caaaagggtc ggtctttgtg ggcttcagtg aatgaaacgc tcatgttttt ggaaaaagag 360
 agagaagttg ttagttcggt ccttagtctt gttaaccnat atgctttaga tggaactaat 420
 gttgctatta atattccaag gctcttactt gacaaaattg agaaacaaat gtttcantt 480
 cacataggaa atgtttatga ngctggaaaa ctgaacctct taacagttat tcnnttatta 540
 aatgaaatct tgaaagtgat gaaatatgaa cgttgtcngc tgatctagcc agattgacng 600
 tnga 604

<210> 2969

<211> 618

<212> DNA

<213> Homo sapiens

<400> 2969

cagacgctct gtactagaaa agaattctat aaaagtaact gttgcacat ttaatccaac 60
 agtttgtgat gctctgcttg ataaggacga gactgattcg tccaaagata ctgaaaaact 120
 ctcttccctt ggagaagaga tgagagaaga tggcttagc ccaaatgaaa gcaaactttg 180

tactgaatct gaagggatca gcccgaataa ctctgcctgg aatgggcccc agctctcttc 240
 ttcaaacaat aactttcaac agactgtctc tgataaaaat atgcctgaca gtgagaaccc 300
 tacgtctgtg ttctctcgga tctcagacca ttcagagact cctaataatgg agttatcctg 360
 cagaaatggt ggttcacaca agtcaagttg tgaaatgaga tctctggttg ttccacctc 420
 atcaaacaaa caggatgttc ttaacaagga ttctgggaag atgaaaggcc atgagagaag 480
 actaggccaa gtenttctg ttctacnaac taagaccagg actaatgttc cgacgttttc 540
 acagtccaat ctagaacagc anaagcagct ttatctcagg gagtctcatt gctcatatng 600
 aaanaccng aagacnct 618

<210> 2970

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2970

tatgaactct ctggagattc tgatctagac ctgcttggtg attgtagaaa tcccagactg 60
 gatttggagg attcttatac ttttaagagg agttacacca ggaaaaaaga tgttcccaca 120
 gatggctatg agtcgtcgtt gaacttccac aacaacaacc aagaggactg gggctgctct 180
 agctgggttc caggcatgga gacgancctc cctcccgggc actggactgc tgcggtaaag 240
 aaagaagaga agtgtgtgcc gccttacgtc caaatccgag atctccacgg gatcctcagg 300
 acttacgcca acttctctat nacnaagaa ctcaagata ccatgagaac ttcacacggc 360
 ctgaggaggc acccgagttt cagtgcacaa tgtggcctgc ccagctcctg gacaagcact 420
 tggcaggtgg canacgacct ctccanaac actttagacc tggagtatct gcgttttgca 480
 catnaacta 489

<210> 2971

<211> 571

<212> DNA

<213> Homo sapiens

<400> 2971

```

ggatattgct gtccatatga cttacaatac tggtcagaca gttgtggcat ttcatagtcc 60
ttattggatg gtcaataaaa ctggccgcat gttacagtac aaagcagacg gaattcatcg 120
aaagcatcca cctaattata aaaagccagt tctcttttct tttcagccaa atcacttttt 180
taataacaat aaggttcaac ttatggtaac tgatagttag ttgtccaatc agttttcaat 240
tgatactgtt ggtagtcatg aagctgttaa atgtaaaggc ctgaaaatgg actatcaagt 300
tggtgtcact atagacctga gcagttttta cattactaga attgtgacat ttaccctttt 360
ttatatnatt aaaaacaaaa gcaaatacca tatatcagtg gctgaagaan gaaatgataa 420
atggctctct cttgatttgg agcagtgat ccccttttgg cctgagtatg cttctagtaa 480
acttcttatt cnagtcgaan ggagtgaana tcctcccna aggatattatt ttaacaagca 540
ggaaaattgt attctattgc gtctaaatna c 571

```

<210> 2972

<211> 493

<212> DNA

<213> Homo sapiens

<400> 2972

```

ttcaagactt cccagctgtg aagttttggg ggcaggaatg aagatggacc agcaagctgt 60
ctgtgagctg ttgaaagtgg agatgcctac aagactgcca gaccggtcag tggcctggcc 120
ttgccctgac agacatctcc gggagaaacc ttccttagaa aaggtcactt tccagattgg 180
aagctttgca tctccagagt ctgactttga aagccgcatg aaaaaaatgg aggaacgggt 240
gaaggcctgt ggccccctct tggaggccag tgaggctgct gatgtggctc aggacccgca 300
ggtttctagg agccctttta aacctggctt tcaggagaat gtttgctgtc ctcagaatcg 360
gctttcagag ggggatgaag gcgagtctga caagggtttt gcagaagaca gaagcagcag 420
aaacgacatg gcancanata ttgctgggcn gctcagccac gctgctgact tgggcacagc 480
ctcccacggt gca 493

```

<210> 2973

<211> 754

<212> DNA

<213> Homo sapiens

<400> 2973

```

cacagctaac atggcggcgc cctgtgtgtc ctacggcgga gcagtttcgt accggcttct 60
tctctgggggt aggggtagcc tcgcccggaa gcaaggcctc tggaaaaccg cggcccctga 120
gttgcaaaca aatgtcagat cccagatatt aaggctaaga catactgcat ttgtaatacc 180
aaagaaaaac gttcctacct caaaacgtga aacttacaca gaggatttta ttaaaaagca 240
gattgaagag ttcaacatag gaaagagaca ttagccaac atgatgggag aagatccaga 300
aactttcact caagaagata ttgacagagc tattgcttac cttttcccaa gtggtttgtt 360
tganaaacga gccaggccag taatgaagca tcctgaacag atttttccaa gacaaagagc 420
aatccagtgg gganaagatg gccgtccatt tcactatctc ttctatactg gcaaacagtc 480
atactattca ttaatgatta ccagctttac ttcccgatca cacaggacag anaacagctg 540
atgttccctt tccactttgt tgaccggctg ggaaagcacg acgtgacctg cacantctca 600
ngggggcggg aagtcnccca ngctggaaca atacgactgg caatggccaa agccttgtgc 660
actttgtccc cccaagacaa agtccaattg gatnaaaaca agctgggact acttactact 720
gatccnctt tttaaggga cggnaaaaaa cccn 754

```

<210> 2974

<211> 577

<212> DNA

<213> Homo sapiens

<400> 2974

```

ggagaagtta gagtccttag aaaaaaatat ggccattctt gatccaccag atgctgacca 60
cttatacagt gcaaaggtaa tgctgatggc tagccctagt atggaagatt tatatcataa 120
gtcatgtgct cttgctgagg acccacaaga acttcgagat ggattccaac atcctgctag 180

```

acttggttaag ttttttagtgg gcatgaaagg caaggatgaa gctatggcca ttggaggcca 240
 ctgggtctcct tcgttggatg gaccagaccc agaaaaagat cccctctgtgt tgattaagac 300
 tgctattcgt tgttghtaagg ctctgacagg cattgatcta agtgtgtgca cacaatggta 360
 ccgttttgca gagattcgct accatcgccc tgaggagacc cacaaggggc gtacagttcc 420
 agctcatgtg gagacagtgg ttttattttt cccggatggt tggcattgcc ttcccacccg 480
 ctgagagtgg gaaaccctct cccgaggata caagcagcag ctggtcgana ancttcaggg 540
 tgaacgcaag gaggtgatg gagaacnnga tgaanaa 577

<210> 2975

<211> 903

<212> DNA

<213> Homo sapiens

<400> 2975

tatttctcag aaagattgcc aggaagatga tacaacagtg gaaggagcag aatttcctgt 60
 ataaagagac ccaggaaact gaaaaaaagc tcctgtttat ttcagagccc atccccacc 120
 ctccaatga attgagaggg cttaatgaga aaatgagtaa taaatgttcc atgttaagta 180
 cagctgaaga tgacataaga cagaatttta cacagctacc tctacataaa aacaaacagg 240
 aatgcattct tgacatttcc gaacacacat taagtgaana tgacttagaa gaactanggg 300
 tagatcacta taaatgtaac atacaggcat ctgtacatgt ttctgatttc agtacagata 360
 atagtggatc tcaacaaaaa cagaagtcag atactgtgct ttttccagca aaggatctca 420
 aggaaaagga ccttcattca atatttactc atgattctgg tctgataaca ataaacagtt 480
 cacaagagca cctaactgtt caggcnaagg ctccattcca tactcctcct gaggaacca 540
 atgaatgtga ctccaagaat atggatagtt taccctctgg tnaaatacat cgaaaagtga 600
 aaataatatt agggacgaaa tagaaaagaa aatctggaac caaatgctga atttgataaa 660
 agaactgaat ttattncccc agaagaaaac ngaatttggt ttcaccggta cagtctttac 720
 tanactgttt cagactagtg gaaaaaaaaat cngaattttt gggtttcnca agctaccag 780
 aaaaagaatt ggtatatgcc atgtttttta natattgggg aaaaagaaaa attccnaata 840
 atctggttaa cagcgttttt tccngtccc ttccaacttc ttccntttac tngggctttt 900

aaa

903

<210> 2976

<211> 746

<212> DNA

<213> Homo sapiens

<400> 2976

```

ggatgccgag cccaggccgg ttccggcgaa gttaaaccct cggagctggc ctcggactgc 60
tggggcgtta ccccttcggc ccccccgct gaccatggca gtgtttcatg acgaggtgga 120
aatcgaggac ttccaatatg acgaggactc ggagacgtat ttctatccct gcccatgtgg 180
agataacttc tccatcacca aggatcagtt tgtgtgtgga gaaacagtcc cagccccctc 240
agccaacaaa gaattagtta aatgctgaag aagccttcag gaatccaaat cctgaacatt 300
tggaatgagc ccagatagaa atatcgaatg caaagctact ggcttcacag agacaaccat 360
ttatgatttg ctgttctgta agagtgtgga ttctttctat caactgctga tatcatcttc 420
aggaagcaag tccataacat gacatatctg gattttgtgc ttagaacctt aaattggaag 480
cattcttaat tatgcatcta aattttaaag aagataattt caaacacagt ctttctttcc 540
cttggtttca tcattttcat atcttaaacc aaattacttc ngtatctgac aacagcatca 600
tctacctcag tcattangat ttcttaataa aaaagaaatt gtatTTTTga cttggttatt 660
aanattatta anattagccc ttcctttgaa atatgacatc agctttgctg ttctaaattt 720
aaaattantt gcttcatcng tancac 746

```

<210> 2977

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2977

```

atatataggg tcttatatgt ttcttaataa attgatccca ttactttata gtcacagctc 60

```

ctattagaag ttttaatgaa gactctccat gagcttaggc ttcaaattac ttgttttgga 120
 aaaggtcatc ttgtccttta taaactgtaa attcatatat tatttagctt taatatgcaa 180
 atacaatatc cttgagttca tcctattaat ttagaaactc ccaggaggta agatgggtgg 240
 ttggagcgca ttctttgggt attttcatta gcattaagtc cttattcttt ataggtggat 300
 ttaattcttg aaaatattca aaagtaattc agagtctagg tgttggggat ggagagaaag 360
 gaggaacaga gaggaaaaaa attagcattt gttgagtgtt gacgatttgt agancatttt 420
 gacaagcact taatatacat cntcattcat tttgatcctc ttaattncct tgca 474

<210> 2978

<211> 715

<212> DNA

<213> Homo sapiens

<400> 2978

gcttccggct ttcgctcgct tccatatccg ctctcttagt cgccctccgc tggccccgcc 60
 ttcgtccccg gaagattggg tcctctggcg agccactgtt tgccgtttga tcgggcacca 120
 aataaagttt ctttattcaa aagcactttt tttttaaagc cacaccaccc ccattctcag 180
 ctctccttc gcggcggtac cgctctgtt tctgcggcga ttgaacagcc gagctttgcg 240
 gccgggatcg cggaaagtga tggctgtcgt cccggcgtct ctctcaggac aggacgtggg 300
 atcatttgca tatcttacia ttaaagacag aataccacag atcttaacta aggttattga 360
 tacattgcat cgacataaaa gtgaattttt tgagaaacac ggagaggaag gcgtggaagc 420
 tgaaaagaaa gctatctctc tcctttctaa attacggaat gaattgcaaa cagataaacc 480
 atttatcccc ttggttgana aatttggtga tactgatata tggaatcagt acctanaata 540
 tcaacagaat cttttaaatg aaagtgatgg aaaatcaaga tggttctact caccgtggtt 600
 gtttgtaaaa tgttacatgt tntcgaaaaa ttcattgaaag caattatcca gantccacca 660
 atcgaatact ttgatgtttt tnaagaatcc naaanaacca aattctatgg gtcca 715

<210> 2979

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2979

```

ggtggctggt tctgcgccgg atccgggaga ggggcgggcg ccattgtgct tcgctgccga 60
ctgcatttcc tcagtcacgg gcctagaact ccaaggagaa aggcggcgaa aaatcttta 120
gaatggagtc taaaccttca aggattccaa gaagaatttc tgttcaacct tccagtcct 180
taagtgctag gatgatgtct ggaagcagag gaagtagttt aaatgatacc tatcactcaa 240
ganactcttc atttagattg gattctgaat atcagtctac atcagcatca gcatctgcgt 300
caccatttca atctgcatgg tatagtgaat ctgaaataac tcaggagca cgctcaagat 360
cgcagaacca gcaacgggat catgattcaa aaagaccta actttcctgt acaaactgta 420
ctacctcagc tggganaaat gttggaaatg gtttaaacac attatcanat tcatcttgga 480
ggcatagtca agttcctaga tcttcatcaa tggfacttgg atcatttgga acagacttaa 540
tgagagagaa gagagatttg gagagaagaa canattctc tattagtaat cttatggatt 600
atagtccccc gaanttgggtg atttcacaac ttcttcctta tgtttcaana cagaattccc 660
ttctatttcc c 671

```

<210> 2980

<211> 508

<212> DNA

<213> Homo sapiens

<400> 2980

```

cctttgcgcg gcacctggcg gtggcgggag ccgttgggct gagtcgggat cggggacgtc 60
gcccagagagc ggggacgagg aggtgtcggg cgcggttcg agcccgggtgt cgggcggcgt 120
gaacttggtc gccaacgacg gcagcttcct ggagctgttc aagcggaaga tggaggagga 180
gcagcggcag cggcaggagg agccgcccc gggctccgag cgacccgacc agtcggccgc 240
cgccgctggc cccggggatc cgaanaggaa gggcgggtccg ggctccacac ttagcttcgt 300
gggcaaacgc agaggcggga acaaactagc cctcaagacg ggaatagtag ccaagaagca 360

```

gaagacggag gatgaggtat taacaagtaa aggtgacgcg tgggccaagt acatggcaga 420
 agtgaaaaag tacnaagctc accagtgcgg tgacgatnat naaactcggc ccctggtgaa 480
 atgacgcccc tccccacct gcccattg 508

<210> 2981

<211> 464

<212> DNA

<213> Homo sapiens

<400> 2981

agtctngttt cgggttccgg ctgcgttggg cttgcgtgcg gctcgctaaa actatggcgt 60
 ccgggcctca ttcgacanct actgctgccg cagccgcctc atcgcccgcc ccaaacgcgg 120
 gcggctccag ctccgggacg acnaccacga cnactaccac gacgggaggg atcctgatcg 180
 gcgatcgctt gtactcgga gtttcaacta ccatcgacca ctctctgatt ccggaggaga 240
 ggctctcgcc caccatcc atgcnggatg ggctcgacct gcccattgag acngacttac 300
 gcatcctggg ctgcganctc atccaggccg cctgcattct cctccggctg ccgcatgttg 360
 cgatggcnac ggggcaggtg ttgtttcatc nttttttcta ctccaaatct ttcgtcgnac 420
 acagtttcca nattgtnggc tatggcttgt attaattctg catc 464

<210> 2982

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2982

aggatgcctg gtggggcana agtccctggg tctcgttccc gtcaggggcg agtgaacctt 60
 cacaacctcc cggggctttg gaatttgact taatgatgaa gggcaacatg gaccactgga 120
 caaagacctg gagttccac tacctgcacc gctctggcca atcccatttg gaaatcagtc 180
 agcaagatcc actctcctct ggactctgag cccccgggag gagaggatgg gagaggtcaa 240

gcgtgtgcaa ttctgttgca ncctcacaac caacaagcag ccgtgttccg acggctctgc 300
 gggaanccca gagggactcc cgcggctcaa acgggggcag atacgtgcag ggccccgggg 360
 aacgtgaagg tgagagacag aacataccgt gaagaaacca ctgagaatgg gagacagang 420
 caggaacagg gatgacactg gangacagca ngcctgcctg gangccanca ttctctacaa 480
 ccttccacaa accaaca 497

<210> 2983

<211> 896

<212> DNA

<213> Homo sapiens

<400> 2983

gataaaagt cactaggggg acagttgatt tcaatctaag aaaagttaac acttggaat 60
 tacaagaagt aaaacaagt caactaaatc atttattagt tgttttttga aagcagtttt 120
 atgtataaat aacaaatgtt tataatttaac taaatgtaag gtacgaatta ttacatatta 180
 aacttttctt ccccttecta gttctgaagt agatatatat atatatatat ctactgtcac 240
 attccatata ttttgaatat ttaactcatc tagttaataa tgtttttatt ccatgcgaat 300
 gatttgatat tttcatcctt atttctcttt ggctacaatt tatattgagt tataatctgta 360
 cattctggta atctaaaatc cttaaaaata ctctaatagc cttgagtgac caactttttt 420
 tttaaagcac agatntaatt gtctaattgt ctgatgggaa cgtaacactt atttttatat 480
 aaaaagagac tgagtaaaca aacattatag aaaaaaagtg aagtttttta gttgtttttt 540
 gtggtattca accagcaagt tgttttcttt cagagtttcc tccttcaaaa agtttatattg 600
 catttacaaa tgttttacaa ggcagaaaagt ttgactggga tagttagtgt taaaagcttc 660
 atgttgaana tcttcacgtt tcattctgct aaaccanaa tatgttccag ctggtgttac 720
 taatttttcc agcttaatcc ctcagtggct tattatttac ataacaataa ctttttatca 780
 gttacatttt atttttattt aaacctgggc caaaaccaa ttattttatg ttaaaatgnt 840
 gtgccaaact atcccaggaa aagtttttaa anccaacnt tggtaaana aanttt 896

<210> 2984

<211> 745

<212> DNA

<213> Homo sapiens

<400> 2984

```
actcttcgct gccttttctg cattcctgac ttctaaaaga tgccttaagg cttaagggat 60
gccatatatt tgataaggcc tctggtaggt accacagcca agaggaccag agatcatggc 120
ccttccagta tgggggcgat agagacatcg gggacctggg atatttgttt tgtgcagaga 180
tctcctgcct gctgtcacca tgagaaacag tggagtggag tggatggatg gcctgacttg 240
aagaaagggc cctggaaagt tttctacttt gctattttga aatttttcc cttcttatag 300
agactttgaa atacttttgt aaatgtgtgt agttgttaat ggaactttgc cttttgcaaa 360
gtcggaaaga gtccgctttt ccatgtgagg ctgcagagc tgaaagggga gctacgtcca 420
ccagcctgtg ggtctttggg ttttnntttt gttgttggtt ttgttttttt aagatggagt 480
tcactcttgt tgcccaggct ggagtgaat ggttcaatct ccgctcactg caacctccgc 540
ctctcgggtt caggtgattc tctgcctca gcctcctgag tactgggatt acagggcgcc 600
caccaccact cccgggtaat ttttgttttt ttaataaaa aacagggttt ccctcctggt 660
tttccaaaac tgggtctcaa accccctgat gtttgggtta acccgagac cctcgggcct 720
ccttnaaaat ncctgggnat ttacc 745
```

<210> 2985

<211> 700

<212> DNA

<213> Homo sapiens

<400> 2985

```
gatgcaaaat gtcngacaca ggtagtccag gtatgcagag aaggagaaga aaaatcttag 60
atacgtcagt ggcatatgtg cggggagaag agaacttagc aggctggcgg ccccgtaggag 120
acagcctcat ccttgagcac cagtgggagc tggagaagct ggagctccta catgaggttg 180
aaaaaaccgc ccactttttg ctgctgcgtg agagacttgg tgacagcatc cccaaatccc 240
```

tgagcgactc gttatccccc agcctcagca gtgggaccct cagcacctcc accagtatct 300
 cctctcagat ctcaaccact acctttgaaa gcgccttcac acctgagcga gagcagtggc 360
 tatgattcag gagacatcga nngcctgggtg gaccgagaga aagagctggc taccaagtgc 420
 ctgcaacttc tcaccacac tttcaacaga gaattcngcc aggtgcacgg cngcgtcagt 480
 gactgtcnagt tgtctgatat ctctccaatt ggacgggata cctctgagtc cagtntcagc 540
 agtgcenccc tcaactccctc ctccacctgt ccctctctgg gtagactcta gggagcacct 600
 ctctgggata ngaagacccc aaaaagccct tcccgggcct ctantccctg cccanaattt 660
 gaaacaggtt tccanattgt tccccgcttg tgggaaaacn 700

<210> 2986

<211> 746

<212> DNA

<213> Homo sapiens

<400> 2986

acgggcggcc ggatttgccc ggaggccgca cccgcctccg gcggggctct cagtgaaaaa 60
 tgtactctga cctgaatcct gaattttcct tgatgggtcaa aagattaaga aatcatgagt 120
 ggaggatctc aagtccacat tttttgggtg gctccaattg ctccactgaa aatcacagta 180
 tcagaagaca cagcttcttt aatgtctgtt gctgaccctt ggaaaaaaat tcagctttta 240
 tacagtcaac attctttata tctgaaggat gaaaaacagc acaaaaatct tgaaaactat 300
 aaagtcccag aatctattgg ttctccagat cttagtggtc atttcttagc aaactgtatg 360
 aatagacatg ttcatgtnaa agatgacttt gtacgttctg tttctgaaac acagaatata 420
 gaatcccaga agattcactc ctctagactg agtgatataa ctagctctaa tatgcaaata 480
 tgtggattta aaagcacagt tccgcatttc accgaanaag aaaagtatca aaagcttctc 540
 agtgaaaata aaattagaga tgaacagcct aaacatcagc cagatatatg tggtaagaac 600
 tttaacacaa atttgtttca gttggggcca taaatgtncg gctgtgttgg atttggtttg 660
 ttattactga aaaaattaat ntaggggnct gaaagttggt acaaaaaaaaaa ttttgtgccc 720
 acccnaaatt tcctggaaan tacnaa 746

<210> 2987

<211> 646

<212> DNA

<213> Homo sapiens

<400> 2987

```
tccggaagtg gcttctgcga caacatgctt gcggacctcg gcttaatcgg aaccataggc 60
gaggatgacg aggtgccggt ggagcccagag tctgactccg gggacgagga agaggagggg 120
ccatttgtgc tgggcagacn aaaaaagct ttggggaaga accgcagtgc tgatttcaac 180
cctgatttcg ttttactga gaaggagggg acgtacgatg gcagctgggc cctggctgat 240
gtcatgagcc aactcaagaa gaagagggca gccactacat tagatgagaa gattgagaaa 300
gttcgaaaga aaaggaaaac agaggataaa gaagccnagt ctgggaagtt ggaaaaggag 360
aaagaagcaa aggaaggctc tgaaccaaag gagcaggaag accttcaaga gaatgatgag 420
gaaggctcag aagatgaagc ctcgagagact gactactcat cagctgatga gaacatcctc 480
accaaagcag atacactcca agtanaggat cggaagaaga agaagaagaa aggaccggga 540
agcagganga tttttgaag atgcntctca ntacgatgaa aacctctcgt tccaggacat 600
gaacctttcc cgccctcttc tgaaggccat tncagccntg ggcttc 646
```

<210> 2988

<211> 766

<212> DNA

<213> Homo sapiens

<400> 2988

```
attaaaaagg aagctcaagg ccaggcgcgg tggctcacgc ctgtaatccc aacacttttg 60
gaggccgagg ccgacgtatc acgagattag gaggtcgaga ccagcctggc caacatggtg 120
aaaccctgtc ttactaaaa atacaaaaac tagccgggcg tggcggcgcg cgcctgtnac 180
ccatgctact cggaaggctg aggcaggaga atcgcttgaa cccgggaggc ggaggttgca 240
gtgagccgag atcgcgcctc tgcactccag cctgggacag agcgagcctc cgtctccaaa 300
```

aaaaaataag gaagctcaag atgaanagtc agaagtggta acttgtttgt tgcacaagaa 360
 acaaatttag cattctatctt nggggatcca gattaccaa aaaaaaanag aagtgaagtt 420
 atttctgcat taantatatt aataaaactt taccactaaa aacaattctg ttagangaac 480
 gccagggaaa aaaatatttg agttttttaga gaagtcattt tttaaacttt tagagggtgt 540
 gacatttaan ttacataatt ttatttanta cctagtatgc aaagacattg ttctggggca 600
 tggcancaaa taaaaagctt ttgtnaatcg cantgtcccc tcttattaac cccgcattcc 660
 tancaggttg gttttttttt gctggaccgc accacantcc gggttacacc aaaaaatata 720
 ncctnatggt atttttttaa gttgaatttt ttttnggaat cccttn 766

<210> 2989

<211> 527

<212> DNA

<213> Homo sapiens

<400> 2989

tcatgatnaa acatctgttt ccactcatac tcgaagtggg aatctaaagc ggccaaagat 60
 tggaaagcgg ttccaggatt ctgaatttag cagttctcan ggtgaagatg aaaagacctc 120
 ccagacttca cttacagctt caataaacia attggagtct actgcacgcc catcagagag 180
 ctcaagaaga ttccctggaag aagaacctga acagagaggg attgaatttg aggatgaaag 240
 cagtgatnga gatgcacggc cagcactgga aaccagcca cagcaagaga agcaagatgg 300
 tgaaaaggaa tctgaattag agcctatgaa tggtagatn atggacgatt ctcttaagac 360
 ctcaattain acagaagagg aagactccac tngtgaagtt ttagatgaag aattaaaatt 420
 gcagcctttt aattccagtg aagactctac naatcttggt ccactgggtg tngaattctc 480
 aaaacccctt ngagggtgat ncaccagatt agacccacg tntacct 527

<210> 2990

<211> 704

<212> DNA

<213> Homo sapiens

<400> 2990

```

ggacggctta gccgcggtgc agactgcggc ggcggtggtc tgaggaagtt ctatcttggc 60
gctaaagcgg agacgcatcc cccgacccga ggctacgatg agcacaccgg ccgtgccccca 120
ggacctgcag ctgcccccca gtcagagggc gcagtccgca ttcaaagagc aaagaagaca 180
aaaactcaag gaacatctgt tgagaagaaa aacgcttttt gcatacaagc aggaaaatga 240
gatgttatcc agtagagatc agagagttgt gacatctgag gaccaagttc aagaaggac 300
taaagtgctg aaacttaaaa caaaaatggc tgataaagaa aacatgaaga gacctgcaga 360
gagcaaaaaat aatacagtgg tggggaaaca ttgtattcct ttaaaacctt caaatgaact 420
aaccaattca actgtngtaa ttgacacacn taaacctaag gatagtaatc naactccgca 480
tttgttacta actgaagatg atccccaag tcaacatatg acattaagcc aggcatttca 540
ccttaaaaac tatagttaaa agaaacanat gactacngaa aaacaaaagc aagatgctta 600
catgccaag aaacctgtgc ttggatctta tcgtgggcca gattgttcca tctaagatta 660
attcntttag aaaacctcta cnantcaaan atganaattt ctgc 704

```

<210> 2991

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2991

```

agccaacacc gcctttctca gcatgggaga cctttgagcc catcagccaa gagccccctca 60
gccaagccag ctatgacaaa gccccagacc cagttcctga gctccaagac tcgttctatg 120
cagaactgca acgtgcagag agcctccaag agaagagcat aaaagaggcc aagaccaaatt 180
gcaggacaat tgcateccctg ctactgcag cccccaaccc ccaactccaaa ggggtactta 240
tgtttaagaa acggcggcag agagccaaga agtacaccct ggtgagcttc ggggctgctg 300
ctgggacagg cgctgaggan gaggacggcg ttccccccnc gagtgagtcc gagctggacg 360
aanaagcctt ctctgacgcc cgcagcctca ccaatcaatc tgactgggac agtccttatc 420
tggacatgga gcttgccagg gcgggctcaa naacatcana aggccagggc tctgggctgg 480

```

ganggcagct gaggtaggtc tctgggcgaa gggtagcagct ctttgaacag cancgcccgc 540
 gcgcagactc cagcaccxaa ggaactggca cgggtcgaac cagcagccat gctcaacggg 600
 gaaggctgca ntcnccacct cggggccana atgctcccca gaagcagctn ttgctcccn 660
 ccc 663

<210> 2992

<211> 818

<212> DNA

<213> Homo sapiens

<400> 2992

gacagatggt tgggagctct tactctgaca tgaagttata attggtaatg gagactcaga 60
 caatgttgta gattacagag tgaactatgc ttttagtgt taaatgcaat agcttgagat 120
 acaatgtttt acttggtaca taaatgctgg tttctttca gatttaagga catacacttt 180
 tttttttttt tttttaagag acagggtctt ctatgttgcc caggctgtct ttgaactcct 240
 gggatcaagt gatcctcctg cctcagcctt cgaagtagtt gggactacag gccacgcca 300
 ccgtgcctgg ctggacatgt aaatttgaag tgaatggta aacatccagc tagctnaag 360
 catggcagac cctaacagaa aagctacagt gtgtttttgc agctatgaag tgaatggttt 420
 cctggggaaa attgtgactt tgtataactg ttgttgaaac cagaataaat tatatttcac 480
 ttgcatatgc ataaattatt aaaattttca gaagtcagtg atacagaagt actattttgc 540
 aatgttaatc tgtttgagtc ttgganaaa gtggtttcat tgtaggtac atagtgcact 600
 gttaatattt taaacaagtt gttcactctt ccatttaagg gatagcagtt ccttggtata 660
 aaatgactgg gatgaattat aaaggaatta tgtttgcat gttgcccttt aaccagctt 720
 tagtaattac tataatctca tatttatgaa tanttctgt taggttacag gaacaaatga 780
 aaaatatttt atgttttcn cnncctttt aaatttaa 818

<210> 2993

<211> 630

<212> DNA

<213> Homo sapiens

<400> 2993

```
cagaagaagc acaaatgctc agtgtattac agtaaacaca aaaccagcac agctgcggcc 60
agcagcacca gcacgactac tgaggaaaaa cagacttcac ccctgggcag ctcactgcct 120
gctgctaaag aggacatttg cactgatgcc atgcgtgaga actggatcag cctcagatat 180
gcaagtggca taaatgtcaa cctgcagaag aatttaaccc ttcccaaaaa cttactgaat 240
aaagaagaaa acacactgaa aaacacaatt gttttcagta atccttcttc agaatgtant 300
atgaaggagg gagtacagac atgtatgttt cctaaggaaa ctgacattaa aacttcagag 360
aacacagccg agttcaagga acgggagctc tgtccactga agacctcaa gaaaactacc 420
tgaaaaccat ttaccaagaa actcacctca gtaccaccag ccagacttgc cagaaaattt 480
ccaggaaaaa tnatgggaat aaccagcaag ttcctgtcna gaatgaagta aatcattgtg 540
aaaatttgaa gaaaggtgga ccnaagcctt cttccgaaaa gaagattccc naacctctgn 600
agaaaacttg ttttctgana aacgggacnt 630
```

<210> 2994

<211> 523

<212> DNA

<213> Homo sapiens

<400> 2994

```
attgcccgcg cggtagggga gcgtggtctc gcgcaagccg gcgtgcggtc cggcggcgct 60
gcagtttgtt ccagccggtc acggggcggc tatggcggcc acgttcttcg gagaggtggt 120
gaaggcgccg tgccgagctg ggactgagga cgaagaggag gaggaggagg ggcggaggga 180
gacgcccagag gacagggagg tgcgtctgca gctggcgagg aagagggaag tgcggctcct 240
tcgaagacaa aaaaaacat ctttggaagt ttctttgcta gaaaaatata cgtgctccaa 300
gtttataatt gctataggaa ataatgcagt agcatttctg tcatcatttg ttatgaattc 360
aggagtctgg gaggaagttg gttgtgctaa actctggaat gaatggtgta gaacaacaga 420
cactacacat ctgtcctcca cagaggcttt ttgtgtgttt tatcatctaa aatccaatcc 480
```


ctcgggttttt ctctgtcggg gcanttncta tgttcanaaa atc

523

<210> 2995

<211> 728

<212> DNA

<213> Homo sapiens

<400> 2995

agatactatg tccctgcttt ctaagatcat tagccctggg tcctcaacac ccagcagtac 60
aagatcacca ccccctggga gagatgaaag ctacccccga gagctctcca attctgtatc 120
tacatatcga ccctttgggc tgggcagtga atctccctat aagcagcctt ctgatggaat 180
ggagagacca tcttcctga tggactcttc acaggaaaag ttctaccag atacttcttt 240
ccaagaagat gaggattacc gagattttga gtattcaggg cctccaccct ctgccatgat 300
gaacctagag aagaaaccag ccaaattctat cctgaaatca agcaagctgt ctgataccac 360
cgagtaccag ccaattctgt ccagttatag ccacagagcc caagaatttg gggtaaagtc 420
tgccttccct ccatctgtaa gggccctcct ggactctagt gagaactgtg accgtctctc 480
atcttcccct gggctatttg gtgccttcag cgtaagaggg aatgaacctg ggtctgaccg 540
gtcaccatca ccgaagtaag aatgattcat ttttcacccc tnactccaac cacaatagct 600
tgtctcaatc taccactggg catctcagtt tgccncagaa gcagtacca gaatctctc 660
ncccagtcce acatcggttc ttttctctcc cgcaaaaaac ccttgccgct cccncgggtt 720
ncccnccc 728

<210> 2996

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2996

caccattct gtcttcaga cagttctctt ccttctctgt actgcgtact gggtcaccac 60

atcccagagc cttgctcagt tatagcaact gctgcgggcg tgcacatggc ataggcccag 120
 taacttacat acatcggtc acttaggcct cagacagcag cacgaggcag gcacttttac 180
 ttcttttacc attagaaagc caaggcctan agtggtgggc tttgaccaca gccacacaat 240
 tttgaagtgg cagaaccagg actggagctt agccctgctc accctagacc tatgcgcttg 300
 acaagtgcgt gactgtgaca ggcccatggg cccggactgc ccataggggt cactgtacca 360
 tggcaaaggc tgaggtgcac caagangctg tggcgctc accctgcctta tttgctggan 420
 aactgtngca aagaaccaca gactgggcga cttagacnat a 461

<210> 2997

<211> 675

<212> DNA

<213> Homo sapiens

<400> 2997

attgactgca gccctcataa aactgtcaag aagactgcga atgaatttcc ctgtttgcc 60
 aagcaagtgg cttggattct ggccacaagc aaggttttca tgtatccaga gttacttcca 120
 gtgtgttccc tgaaggcaaa gaatccccag gataagatcg tcttcaccaa ggctgaggac 180
 aatttgtag ctttaggact gaagcatttt gaaggaactg agtttcctaa tcctctaate 240
 agcaagtacc ttctaacctg caaaactgcc caccaactga cagtgagaat caagaacctc 300
 aacatgaaca gagctcctga caacatcatt aaattttata agaagaccaa acagctgcc 360
 gtcctaggaa aatgctgtga agagatccag ccacatcagt ggaagccacc tatagagaga 420
 gaagaacacc ggctccatt ctggttaaag gccagtctgc catccatcca ggaagaactg 480
 cggcacatgg ctnatggtgc tagaaaggta ggaaatatga ctggaaccac agagatccac 540
 tcagatcgaa gcctanaaaa agacaatttg ggagttgggg antgaatctc ggtaccactg 600
 gctattgnct aagggtgtat cctgaaaact gaagccngtt tgccccccgt ttccccnggg 660
 aaagnttggg aaaca 675

<210> 2998

<211> 702

<212> DNA

<213> Homo sapiens

<400> 2998

```

ggagaatggc tcaactctcc aaatagagag aatttctatc agttgcaagt acgaaaattt 60
cctgccgatt atataaaata ctgggagttt gcagtttata tggaagaatg tgaactggct 120
aaacagcttt atccaaagga aaacgatttg gtgttttttag ctcttgagag aataaatgaa 180
gagaagaaag atacagagag aaatgacata caagatctcc acgaatatca ttctggttat 240
gttcataaat ttgccgcac gtcagtcatt cgtaatggga aaactgagtg ttacctttcc 300
atccagactc aagagaactt tccggccaat ttaaacgaac ttgtgaattg tattgtaatc 360
agttctctgg taactacaca aaggaagttg aaagccatgt ctctgttggg tngtcggaac 420
caactggcta gagctgttct gaatccaaac cctatggact tctgtacaaa agatttactg 480
actacnacat ctgagagaat tattgcgtnc tttagagatt tcaatgaaga tcaaaagaaa 540
gcaatagaaa ctgcatatgc tatggtgaaa cactcaccat cagttgccaa aatctgcttg 600
attcatggac cacctggaac nggaaaatcc aaaactattg ttgggctcct ctttcgtctn 660
ctgncngaaa accnaagaag gggcttcaaa caaaactcca tg 702

```

<210> 2999

<211> 605

<212> DNA

<213> Homo sapiens

<400> 2999

```

atgtgacctg ttgactttgt atctgcacgt gggcacgagt gatgttcagt ttgctaggca 60
ctagtcatag tggtatggac gtggtggagt gtaaggtctt gatgaattac ggcagtatgc 120
agaaaaggaa ccaaggccag agagacaaat aatgcctcat gtcccactgc tttaaaatta 180
cattaattta taaaatggcc actatgggct ctttttgact gtttctcgga gtaggaacaa 240
aataagacat taaatggtgg cttgaagaaa aagatacnca ttttcagaaa aaagaaaggg 300
gagggctgca gggatcctgt cttggcggga gctctccagt ctgttgatt agcacaggga 360

```

cacgcttatg gtgccatgac gccgaaacta gtctcccc atctccagca taggcaacgg 420
 cctgcagggg tgagtgtcag aaaagactta ctttgaaga aaagggtttt tttttgtttg 480
 tttgtttttt gttttttttt gtttgtttgt tttgggtttt tttcctgaaa tttcctgata 540
 cctttttcag aatgtcnccc ttgtaaatan gcacctaaag ccaagttggt cancaaaact 600
 cctga 605

<210> 3000

<211> 642

<212> DNA

<213> Homo sapiens

<400> 3000

ggtaagtatg tttgttcgag ctaccagtcc agaatctacc agtaggagtt ctagtaaaac 60
 tggacgagat actccagaaa atggagaaac tgcaattggt gctgaaaatt cagaaaaaat 120
 agatgagaat tcagataaag agatggaagt agaagaatct ccagagaaaa taaaagtaca 180
 gacaacacca aaagtagaag aagaacagga tttgaaattt cagattggag aactggcaaa 240
 taccctgaca agtaaattcg agtttctagg cattaataga caatccatct ccaactttca 300
 tgtgctgctc ttacagactg agactcgaat tgcagactgg cgggaagggg ctcttaatgg 360
 aaactacctt aaacgaaaac ttcaggatgc agcagaacaa ctaaaacagt atgaaataaa 420
 cgccactcct aaaggctggt cctgccactg ggacagggat catagacggt atttctatgt 480
 aaacgaacag tcgggcgagt ctccagtggga gtttcagat ggtgaagagg aagaagaaga 540
 aagccccgcn cnagaaaata ganatgagac tcttgccaaa cagacctga aagacaaaac 600
 tggcncctgat tcnaattcca cagaatcctc tgaaacttcc cc 642

<210> 3001

<211> 579

<212> DNA

<213> Homo sapiens

<400> 3001

tatagggaag	tgatttaaaa	agaaaaaaca	aacaacaaca	aaaaaaactc	ttcgaataa	60
agagggctgt	aaattttgaa	ttccagtgtc	ggatcctttc	aagcactgag	aaattctttc	120
tcaggtttct	ttttttgggg	gagacagggt	cttgctctgt	cacccagact	ggaacacagt	180
ggcacgatct	tggtcactg	caacctctgc	gggctcacgc	aatcctcctg	ccacagcttc	240
ccaagtagct	gggaccacag	gcgcgagcca	ccactgctgg	ccagtttttg	tatttttttt	300
ttttttgtan	anacagggtc	tcgccatgtt	gccaggctg	gtttaaaact	cctgagctca	360
agcagttctc	ccacctgggc	ctcccaaagt	gctaggatta	cagacatgan	ccactacncc	420
tggccnggtt	tctgttgga	acccanattg	tgacaagaca	tttgttttct	tccgaatcac	480
cagatttgca	gcttactgtg	ccnaaagtgg	actggctgcc	ggggcccntc	aatgccctc	540
tggcccatgg	cacactcanc	agaangccaa	accntgct			579

<210> 3002

<211> 784

<212> DNA

<213> Homo sapiens

<400> 3002

tgctaataa	ggtagganag	tacatttggt	ggaataacag	aaatggtgat	ttcagcctaa	60
aagtttctga	gggtaaagga	tcacatgacc	ttcaggaaac	tctctgcctc	ctgtagggtc	120
tttctatct	cccccatcct	tcctacccc	tttcccttt	tccttctct	ctttttctct	180
cactgtcact	ctgtctacac	acactggcat	cttttgaaca	ctaaaagtaa	gcactgtttt	240
ttaaaaaagt	aattatttgt	tggatcagat	acttttatcc	caagtgaata	ccttactga	300
gatgtggcca	atgcaatagt	ttcacagtaa	aaacagtgcc	tataagaaaa	tagatcacat	360
actatttttc	aatgatatta	agtgtatitt	gtaactatit	tcatttggtc	cttggttaaca	420
tgaaataata	catggaactt	acctttataa	taaaaatgga	gtgccctggt	tcatcataga	480
ngtgcactta	gtttgccctt	aatgggaagt	atacttgctg	tgtggattga	tagcaccttc	540
ttgaaatgga	ngaactcagc	tggcctcatg	gatgtgcaat	ttttgcagtc	ccacagggcc	600
ttgcatacag	aaacacccga	gtcagttga	atgtctgttt	gantttttcc	tatttatitt	660

ttgaaaacca gttccccctt gtcttttttg tcncccnagg antggaattc cattggcnca 720
 aaacatgggt ccctgttacc ctccaacccc ctggctgaaa ggggatcctc cccacctcca 780
 ncct 784

<210> 3003

<211> 579

<212> DNA

<213> Homo sapiens

<400> 3003

ttactgtgtg ttctctacc tacctctcat tctcaccttc ttttcctaag cttttttttt 60
 ctctttaatt tntcccccta ggaatcctcc ctcaatttca aagccctcct tcccttctcc 120
 tggctcttcc cctctaattc ccttctcctt ccaactttgg tttctggctc cttttcctca 180
 actttccttt cacctcctta attccttctt tctggcccaa tatttggctc ccaaattttc 240
 atatagtctt gcctctttct tccccccgct tctgctggcc ccctaagctt cccctgttaa 300
 atccccctct cctgctata tccacctgtc ccctctctgg catccccaga tcccagttct 360
 cccaagctg tggttctccc tgtgctctcc ttgtcactgg ntgccccctt tgctctccca 420
 gcaaccatgc tgctctgtct gccctggctc caaatccctc cttctctcnc caactctcca 480
 tcttnaagan cctccccctt tctgaccnc tccctatctt ggggtgaaatt ttatctctcg 540
 tagaaaacca nttttctctt aaaatttctc tagntggct 579

<210> 3004

<211> 698

<212> DNA

<213> Homo sapiens

<400> 3004

tgattttgga gttgctggct agctgacaga tacacagatt aaaagaaata cttttgtggg 60
 aactccattt tggatggctc ctgaagttat tcaacagtca gcttatgact caaaagctga 120

catttgggtca ttgggaatta ctgctattga actagccaag ggagagccac ctaactccga 180
 tatgcatcca atgagagttc tgttttcttat tcccaaaaac aatcctccaa ctcttgttgg 240
 agactttact aagtctttta aggagtttat tgatgcttgc ctgaacaaaag atccatcatt 300
 tcgtcctaca gcaaaagaac ttctgaaaca caaattcatt gtnnaaaatt caaagaagac 360
 ttcttatctg actgaactga tagatcgttt taagagatgg aaggcagaag gacacagtga 420
 tgatgaatct gattccgagg gctctgattc ggaatctacc agcagggaaa acaatactca 480
 tcctgaatgg agctttacca ccgtacgaaa gaacctgac caaagaaagt acagaatggg 540
 gcagagcaag atcttgtgcc aaccctgagt tgtttgtcta tgataatcac cctgcatttg 600
 ctgaacttaa accgcaggac aagaataacg ctngcaggaa tcaggcgatt gaagaactcc 660
 aaaaaaattt tgctgtggct gaanccncc tccccggc 698

<210> 3005

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3005

tttagtttaa aaanaaaaaa tgcagggtga tttcttatta ttatatgtta gcctgcatgg 60
 tttaaattcga caacttgtaa ctctatgaac ttagagtta ctatttttagc agctaaaaat 120
 gcatcacata ttcatattgt tcaataatgt cctttcattt gtttctgatt gttttcatcc 180
 tgatactgta gttcactgta naaatgtggc tgctgaaact catttgattg tcatttttat 240
 ctatcctatg ttaaattggtt tgtttttaca aaataatacc ttattttaat tgaaacgttt 300
 atgcttttgc caacacatct tgtaacttaa tatactagat gttaaggttg ttaatgtaca 360
 aaaaaaaaac ccttatactc acctgcgttt tcatttgttt gacatttgtc tattattgga 420
 tttcattatc atatgaactt gtcagtggga acaaaactgt ctaaaaattt ttctcttacg 480
 tttaacatac aatcatgtga aatttangca ganttcgata aattactggc aaaaacaaaa 540
 ctcttttata aagattttct aatgttgact ttaatactct aacatggtac aaaccaaag 600
 gtaaaatccc aagtcatttc ttttttact ctattcagca acagaattaa gtggatgaag 660
 atattctact gtgcattaaa tcttgaactt ttataaaaca tgttcaaaaa ttgtacaaaa 720

naaattccnc ctggntaaan tctttcccn aataca

756

<210> 3006

<211> 706

<212> DNA

<213> Homo sapiens

<400> 3006

gattgcaaag gaaaaattag atcaattaaa gcaggagttt gaattctggt atcctgttga 60
 tcttcgcgtc tctggcaagg atcttgttcc aaatcatctt tcatattacc ttataatca 120
 tgtggctatg tggccggaac aaagtgacaa atggcctaca gctgtgagag caaatggaca 180
 tctcctcctg aactctgaga agatgtcaaa atccacaggc aacttcctca ctttgacca 240
 agctattgac aaattttcag canatggaat gcgtttggct ctggctgatg ttggtgacac 300
 tgtanaanat gccaactttg tggaagccat ggcagatgca ggtnttctcc gtctgtacac 360
 ctgggtagag tgggtgaaag aaatggttgc caactgggac agcctaanaa gtggtcctgc 420
 cagcactttc aatgatagag tttttgccag tgaattgaat gcnggaatta taaaaacaga 480
 tcaaactatg aaaagatgat gtttaaagaa gctttgaaaa cagggttttt tgaatttcag 540
 gccgcaaaaa ataantaccg tgaaattggc tgtggaaggg atgcacanaa aacttgtgtt 600
 ccggtttatt gaanttcaaa cacttctcct ccctccattc tgtccacatt tgtgtnaaca 660
 catctggacn ccctgggaaa acccgaccna ttatgaatgc tcntgg 706

<210> 3007

<211> 665

<212> DNA

<213> Homo sapiens

<400> 3007

gggacgggggt ccgactcaga aatggcggcc tccatgttct acggcaggct agtggccgtg 60
 gccacccttc ggaaaccacc ggcctcggac ggcccagcaa cagcaaagga atctctcact 120

acatgaatac atgagtatgg aattattgca agaagctggt gtctccgttc ccaaaggata 180
 tgtggcaaag tcaccagatg aagcttatgc aattgccaaa aaattaggtt caaaagatgt 240
 cgtgataaag gcacagggtt tagctggtgg tagangaaaa ggaacatttg aaagtggcct 300
 caaagganga gtgaagatag ttttctctcc agaanaanca aaagctgttt cttcaciaat 360
 gattgggaaa aaattgttta ccaagcaaac gggagaaaag ggcagaatat gcaatcaagt 420
 nttggtctgt gagcgaaaat atcccaggan agaatactac tttgcaataa caatggaaag 480
 gtcatttcaa ggtcctgtat taatangaaa ttcacntggt ggtgtcacat tgaagatgtt 540
 gctgctgaga ctctgaagc aataattaaa gaacctattg atattgaaga aagcatcaaa 600
 aangaacaag ctctcccnct tgcacagaan attggatttc cccttatatt gtggaatcng 660
 canca 665

<210> 3008

<211> 497

<212> DNA

<213> Homo sapiens

<400> 3008

agtagacctt tctgcgagta cgagccaacc ggcagaccg actgaatgct cggattggga 60
 aaatgaaacg gaggaagcaa gatgaagggc agagggaagg ctcttgcatt gctgaggatg 120
 atgctgtgga catcgagcat gagaacaaca accgctttga ggagtatgag tgggtgtggac 180
 agaagcggat acgggccacc actctcctgg aaggtggctt ccgaggctct ggcttcatca 240
 tgtgcagcgg caaagagaac ccggacagtg atgtgactt ggatgtggat ggggatgaca 300
 ctctggagta tgggaagcca caatacacag aggtgatgt catcccctgc gcaggcgaag 360
 agcctgggtga agcccaggag agagaggcac ttcggggcgc agtcctaaat ggcggccctc 420
 ccagcacgcg catcacacct gaattctcta aatgggccag tgatgaaatg ccatccncca 480
 acnntggtga aagcagc 497

<210> 3009

<211> 495

<212> DNA

<213> Homo sapiens

<400> 3009

```

agttctcctg agggaagagg agtgtagtag gggggacgCg gCggcggCgt tgacaatgta 60
gttttcttgg aggctttttt ggtccaattt gtgagatcga tattgttctt aatgatgggg 120
aaaccaggaa aatggcagaa atgaaaactg aagatggcaa agtagaaaaa cactatctct 180
tctatgacgg agaatccgtt tcaggaaagg taaacctagc ctttaagcaa cctggaaaga 240
ggctagaaca ccaaggaatt acaattgaat ttgtacgtcg aattgaactt ttcaatgaca 300
agagtaatac tcntgaattt gtaaacctag tgaaagaact agccttacct ggagaactga 360
ctcagagcag aagttatgac tttgaattta tgcaagtga naagccatat gaatcttacn 420
tcggtgccaa tgtccgcttg aggtattttc ttaaagtgac aatgntgaga agactgacag 480
atttggtaaa agaat 495

```

<210> 3010

<211> 612

<212> DNA

<213> Homo sapiens

<400> 3010

```

acttttccng atctaggagc accatggaca cctcgtcaga gatgctggta cggtttggac 60
ggcgtgttgg acgggcgaag gaaagtacag tcttaggtat gtctttatca gcagtgtgaa 120
aacggactaa tacagtaa at tggtaccagc agagtggggc attgctgaaa agataactga 180
aaatgtggaa gcgactttgg cactgggtaa caggcagaga ttggaacagt ttgaagagct 240
cagaagaana caggaaaatg tgggaaagt ttggaacttc tagagacttg ttgaatgcct 300
ttgacaaaaa tgctgattgc gacatggaca ataaaaatgca ggctgagatg gtctcagatg 360
gagatgagga actttctgga aactggagta aaggtgattc ttgctatgtt ttagcaaaaa 420
gactagcgtc attttacctc tgccctagag atttgtggaa ctttgagaaa gatgatttag 480
ggtacctcgc anaanaaatt tctaagcagc aaagcattcc agaagtgagt tggatactgt 540

```

taagggcant cagttttaaa agggaacag agcatntaaa ttcanaaaat ttgttancct 600
gatctggcan aa 612

<210> 3011

<211> 473

<212> DNA

<213> Homo sapiens

<400> 3011

tcgctcagga tgtcactctc tttgatgaga ttgtcggcaa aatctgccaa gccggggtgt 60
gggtatttcc cgggagaatg ctcttggagt cctgcctgcc ctcagccgtg gggcagccgc 120
tgctctgggt gccgctgctc aagctgccct cgtcagagtc cagcaagggt cccttgccag 180
tctcaccggt ccactcgttg ctggaggaat tcttcaggac ttttaaagac ctggatgaag 240
ctacagttag aaaaacacat ttcgctgtga tacagaaaca ggttacacaa tgtgtaatgt 300
ttgcctcaaa gcttgtgtaa gatttaacat taagatttta ttttatgata tgacttcagt 360
tagcaactat cctggtaatt aggcaaaaat gtagcttctg aaaacatgga catttttgac 420
ttaggtttac agttgtaagt taggcnattc acatttttag attaccanan ctc 473

<210> 3012

<211> 727

<212> DNA

<213> Homo sapiens

<400> 3012

gatttcatgc attgcccttc agctgccatg ttatgaggac acttggagaa agctacagga 60
gaggaaactga ggtctcctgc catcagccac ttgagtgagc atgggagtgg attctccaaa 120
ctccagttaa gacttgagat gtccacagtg gcagccacta gcttgactgc aacttacgag 180
agaccctgag ccagaggcac tcagttaagt catacacagt ttcctgaccc gtaaaacctg 240
tgacacaatg aaggtttgtt gttttggggg taatccgtta ttcagcaata gataacgaat 300

acagaaggct tgtaattgta taaccaacgt gagtttataa gcggatatct gacctcattt 360
 gttttctcct gaaaaagtta tagaaaaatc acaagactgc aagtcactct ctctctttct 420
 tttgtgggga ataaacaagt ntaattacaa tttctaaacc tattgtttta ttctcaaata 480
 tnattacnat ttaaacagga tattgtanag ctccatcata gggattaaca ctnattagaa 540
 ttaaagaacg tttttgtgaa tgtcagcttt ttttttttta aataaacact cntcccttga 600
 taatgttttt ctttttcata aaattaaaaa aaaaatgtgg gttgtantan gtgtatatat 660
 ttatgttggg acatgaaaat nttttgatac agggcntgac gtgttntaac cccctcctgg 720
 gaaaaat 727

<210> 3013

<211> 539

<212> DNA

<213> Homo sapiens

<400> 3013

attctccggg ctgcggaggg taaagagcgg gctcgggccg aggctggagg gctgggtggg 60
 gccagagcgg cgcttcgggg gcccgcgagg gacgaggagg ggagagaatc tgaggagctg 120
 ggttgccatt aggggactcc tgaggtccta tctccaggct gcggtgactg cactttccct 180
 ggagtggaag ctgctggaag gcggaccggc cgccatgtcc acgttcaggc aggaagacgt 240
 ggaggaccat tatgagatgg gggaggagct gggcancggc cagtttgca tcgtgcggaa 300
 gtgccggcag aagggcacgg gcaaggagta cgcanccaag ttcatacaaga ancgccgcct 360
 gtcateccanc cggcgtgggg tgagccggga ngaaatcgag cgggaagtga acatcctgcg 420
 ggagatccgg caccccaaca tcatcaccct gcacgacatc ttccanaaca agacggacgt 480
 ggtcctcatc ctgnaactgg tctctggcgg gganctcttt tgacttcctg nnggaaaaa 539

<210> 3014

<211> 383

<212> DNA

<213> Homo sapiens

<400> 3014

```
gtggcccgga tgttcggtgc agctgccaga tccgctgac tagcgcttct cgaaaaaac 60
cttcaggcgg cccatggctg tcgatattca accagcatgc cttggacttt attgtgggaa 120
gacctatta tttaaaaatg gctcaactga aatatatgga gaatgtgggg tatgcccaag 180
aggacagaga acgaatgcac agaaatattg tcagccttgc acagaatctc ctgaacttta 240
tgattggctc tatcttggat ttatggcaat gcttcctctg gttttacatg ggtcctccat 300
ngaattgtac tcggggaaaa aagattccag cgcacttttc caacacatca ctgcattatt 360
tgaattgcnc atnggcacct ata 383
```

<210> 3015

<211> 767

<212> DNA

<213> Homo sapiens

<400> 3015

```
gttattaatc aaaatgcaaa gcagttggaa aataaggagc atctctggga aaatgtggag 60
tgttatagtc accccattaa ctgaattgat taatcagacc aatgaagtaa atcanggtga 120
tgccttagaa cataatttta gtgccatcta tgggtgattg actttaccag taaaccacat 180
tttttcagaa cagagatttc cagtgccac catgaagact ttgcttagaa cttggtcaga 240
attatataga gcatttgctc gttgtgctgc tttggtggca acagcagaag anaacttgtg 300
ctgtgaggaa ctttcttcca agatnatgtc cagtttggaa gatgaaggct tttctaattt 360
gttgttcgtg gatagaatta tttatattat tactgtaatg gttgattgca ttgacttctc 420
accatataat attaaatatc agcccaaagt taaatcacca cagagacctt cagattggtc 480
caaaaagaan aatgagcccc tagggaaatt gacttcttta tttaaactta ttgtgaaagt 540
gatctattct ttccacacac tgagcttcaa gggaagcaca ttctgatncc ctcttccta 600
ttggcaactc natccccggc attatttccc gtgttcttgg gcatatttct tttgccttct 660
atgatccgaa aaatatattg aactttaacn agacctctgg ctttttttat gaaaactcca 720
agcttgatna aattcccaaa gtttnttggt ttctgaaaca cnanttt 767
```

<210> 3016

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3016

```

gactcaccct gggccggggg tgaggcttgg actgtttctt tttccaaaag aggagctcaa 60
aagagaaaagt tcatctagaa atctcaaagc catgtctcag gatgaactan agtatgccct 120
tacaggggat cagtgtcatt caaggatgtg actgtggact tcaccagga ggagtggcag 180
caactagacc ctgctcagaa ggcgctttac aggatgtga tgttgaaaa ctattgccac 240
ttcgtatctg tggggttnca catggctaac cctgatatga tccgcaattt ggancaagga 300
aaaaaagcta tggacccaaa aanttttccc aagttacagc tacctagaag aagatgggaa 360
aactgaanat gtcttagtga agttcaaaga ataccaagac aggcattcta gaccctcat 420
attcatcaac cacaaaaaac taattaagga gagaagtaat atttatggta aaacatttac 480
tctaggcaag aaccgtatta caatactatg ttaatatnaa cctgatggaa aagttttgaa 540
aaatatttca gaactagtcn ttagaaatat aagcccccta aaana 585

```

<210> 3017

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3017

```

attatgatgg aagattaaag tgtggtgaca tgattgtggc cgtaaattggg ctgtcaaccg 60
tgggcatgag ccactctgca ctagttccca tgttgaagga gcagaggaac aaagtcactc 120
tgaccgttat ttgttggcct ggcagccttg tatagatttt ggaaattggt ttcaaattctt 180
gcatcttcct ttttagatt tttgaaagaa aacccttttg tttcattgtg tttgtggttt 240
aggagctgct gacactgctg gtatacacag ggccaaaacc cactaagatt gtccgtttat 300

```

gtttatttaa atggtttcct aagttagtta catttctttt agcttggaaa cagtcttcca 360
 ctaacctttg tgagtttata ttttcagaat tcagacttag ttgttaaaat gttacctatg 420
 gtaatgagca aagctcaccc aaactgtgcc ccanatggag taaagacctt ctggtgggtc 480
 tttgttttca gtaactgaat catanaacga attctgtatc cctcaggcct gatgtcagca 540
 aagccagtaa caacagcgtg tactgccact gtcataacca ataccatgaa atgaatatac 600
 tttaaatttt ggtgataact gttccccatt ttttttgaa ccacagtctc actctcaccc 660
 angctggaat gcantggcac aatctcanct cactgcaanc tccgcctcct ggggttcacg 720
 ccattctccc acctcancct cccaattac ttgga 755

<210> 3018

<211> 469

<212> DNA

<213> Homo sapiens

<400> 3018

cgtctatttc catccccctc ctcatcacia aaagaaacgt agaattctatg gcacagccta 60
 gtattttacc caatactgtt agtgtataat aatttacaga atgaatttta tttacttgtg 120
 gtttttttct taatgtaaca tttcaaggag cactatatat atacacacat atatatacac 180
 cttggcttat gactgaaata atggagcaaa ttattaaata cagacagact tgagagataa 240
 ctgaaaatta aaagaactcc tctgagagaa aaaaaaatat gacactgtta tgatgtttta 300
 taaagttgca tgatcatttt tcacatatct acttgaggct aaaatacatt tgcatacatt 360
 atgttttaca aatatntttc ttttaaggnt aatatcccc catcccnaaa cagatnctag 420
 gatnaaaatt ccctaagaaa cacttatttg accctgaatt ttaaaaatt 469

<210> 3019

<211> 439

<212> DNA

<213> Homo sapiens

<400> 3019

```

agtcgtggct gcagcgctga ggcgagaggt tgggtgggtgt ctccggccat aatgaccag 60
gctgagaagg gtgatacgga gaacggaaag gagaaggcg gcgagaagga gaaggagcag 120
cgcggcgtga agcggcccat cgtgcccgcg ctgggtgccg agtcgctgca agagcaaadc 180
cagagcaact tcatcattgt catacatcca ggttcaacaa ctttaaggat tggtcgagcc 240
acagacactc ttcctgccag cattcctcac gtcattgccc gaagacacaa acaacaaggg 300
cagcccctat acaaggacag ttggctccta agggaggagc taaataaacc agaaagtant 360
tgaaccaaag acaaattggc cttaaantgg tggatcaagc aatatggtct aaaaagatgt 420
ccattgttac aagacgcnt 439

```

<210> 3020

<211> 803

<212> DNA

<213> Homo sapiens

<400> 3020

```

ttgttgggtg aaatgtaagt cttttcctaa agttttaatc agaggtagcc atcactaaga 60
cttaagccac ctgtggttct cttaagtffc actgaagcca gaagaaggaa attaccacaa 120
cttgtattat actaattatc ttcattatta acgatcatat tagagccact gacatgtccc 180
aaattatatt aaaataaaaa cctgcattgc tctgacatga agctcaattc aatgtaataa 240
acaaattagg tattaacgt tataatttaa aaaacttcta cgatatcacc agaaatcctg 300
gtgaaattta attttttccc ttttttangt cagtggccgg tgggataaat ttttctaaac 360
tttttcctgc tatgattttg aaggcgaata catagagcac agttcagtaa aagagttcca 420
agccttttca ctgggagcat ttacattttg attctgttgt catttgaaat aaaacatctg 480
cnaggagat aatgagctta agttacaatt gactttggga aaaaataaca gacttttgtg 540
tttcctccat catgttatcc atanggaatc tccagttatg tgaacaatcc cagtctttta 600
agacaatact tanatctaaa tgcaaaatct ancatgcana agctttttta ggattttaga 660
ctgtcccca gaacttggct cgagatggga ttaccgaat tacaatgcng ttttccactg 720
gttactccaa ctgatcttat ctcatcntg ttactcactg tgcccntnga accccaaaag 780

```


tggaatattt tgtctcntta ttt

803

<210> 3021

<211> 639

<212> DNA

<213> Homo sapiens

<400> 3021

ttttctattt tgtacataca ttattttgta tatactgtat atgatgactt cagtgcagcag	60
tgaccattgt cgagggtgctc gggaaaaacc acagatttca gcagcacaat caacgcaacc	120
acagaaacaa gtggtacagg caacagctga acagatgcgt ctcgctcaag tgatctttga	180
taagaatgat tcagattttg aagctaaagt taagcagctt atggaagtga cagggaaaaa	240
tcaggatgaa tgcatagtgg ccctacatga ttgtaatgga gatgtgaaca aagctatcaa	300
tatattgctg gaagggaatt cagacacaac ttcatgggag actgtagggt gtaagaaaaa	360
gaattttgca aaagaaaatt cagaaaacaa agagaataga gagaagaana gcgagaaaga	420
atcgagtcgt ggacgtggaa acnacaaccg gaaaggaaga ngcggcaatc gtggcagana	480
atttagaggt gaaaaaaatg gaattgattg caatcaagtg gacnaacctt cagatcgtgg	540
caagcgagcc cggggttnaa gatttggacn tggcanaagg anaagggcag gaaggttctc	600
aaccaaggc atggggacat ttaatcctgc anactattc	639

<210> 3022

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3022

ttcaaaggga gacagacttt ctcaagtgtg cccactgcct tgccccccgg ccatcanatc	60
cctttgctcg cttctgtcaa gaatgtggct ctcctgtccc acctatattt ggctgtcgtc	120
tcccaccccc agaaggagct cagatgggct tgtgtgcaga atgcanaagc ttggtaccca	180

tgaacactcc catctgcgtg gtgtgtgagg cccctcttgc tctacagctg cagccacagg 240
 caagcctcca cttgaangaa aaggtaattt gccgggcctg tggtacagga aatcctgctc 300
 acctnaaata ctgtgtcacc tgtgaggggg ccctgccttc atcacaagan tcnatgtgca 360
 gtggggataa agcccctcct ccgcccactc anaaaggggg gaccatttcc tgctacanat 420
 gtggtcncctg gaatctctgg gaagcgtcct tctgcggctg gtgtggaacc atgctcggca 480
 ttcttgctgg ctgttctgtt tgccctanat ntggggccan caatcacctg tctgcccgat 540
 tctgtggctc ctgtggtatt tgtgtnaant ccctagtga actta 585

<210> 3023

<211> 464

<212> DNA

<213> Homo sapiens

<400> 3023

aattgcttcc ggggagttgc ganggagcga gggggaataa aggacccgcg agggaaaggc 60
 ccgcggatgg cgcgtccctg agggctcgtg cgagttcgcg gagcgtggga aggagcggac 120
 cctgctctcc ccgggctgcg ggccatggcc acggcggaac ggaaagccct cggcatcggc 180
 ttccagtggc tctcacggcc actctggtgc tcatctgcgc cgggcaaggg ggacgcaggg 240
 aggatggggg tccancctgc tacggcggat ttgacctgtt cttcattttg gacaaatcag 300
 gaagtgtgct gcncactgg aatgaaatct attactttgt ggaacagttg gctcacnaat 360
 tcatcaaccc acagttgaaa atgtccttta ttgttttctc caccccaaga acaaccttta 420
 tgaanctgac ggaanacaga aaaccantcc ctcnggcct anaa 464

<210> 3024

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3024

aaaccatgta cctcaaattg tagaattaat acttcgagaa cagtgccaat agaaacagaa 60
 acatgaagtc tggggttcaa accagaacta catttgtaac acagaccctg aaactgatgg 120
 cctttcacct tctgttgctt ctccaagtcc caaagaagtc aattttgttt caaggggagc 180
 ttcaagtcac cagcccagag ttccactttt tcctgaaaat ggtttacacc agcagccaga 240
 acccttgctt ccaaataata tgaaatctgc ctgtgaaaaa cgtttagaat gttgtagttc 300
 tcctcattct aagccaaatt gctcaaccct ttctccacca atgccactgc cccagctgtt 360
 accttcggtt actgatgcaa ggtcggcagg accttctgat catattgatt cctcagttac 420
 tggggttcaa aggtttcgag atactctaaa aataccctac aagctggaat taaaaaatga 480
 accaggggag aacggatttg aaacacattg ttatagatgg gagcaatgtt tcaattaccc 540
 atggtctgaa aaagttcttt tcttgctgtg gaattgcaat tgcagttnaa tatttttgga 600
 ancttgcaa caaaaacatc nctgtatttg tccctcagtg ganaacaagg cgtgatccta 660
 atgtcacaga acagcacttc ttaaccanc tccagganct cggaaatatt atctttaact 720
 cctgccccgg atggtctttg ggaaaaaaa attgcttcct catgaatgaa cagggtttct 780
 actacacttn nccggaaaaa aatgggtggg nnttanttgt ttacaaaatg aataatttcc 840

<210> 3025

<211> 622

<212> DNA

<213> Homo sapiens

<400> 3025

gcggttcctc taggaaaaat tcctttgtgc agatcagggc ccgtggattg gtgagtgaat 60
 cctaaccacg tcttccttg cctgtcttca ctcttctccc cagaatcacc acttctgcac 120
 tgggtgtctga aggtgtattg agtgattttg tggagggcag aagtaggaag tctttgggac 180
 aaaactgtat ttaccttggg atctgtgaac aagaggaacc tcagcagcca ggacaggcag 240
 gagcagtgga atagctacta tggttcttg aatcctggtt aatgtaaagg angaggtgac 300
 ctgccccatc tgcctggaac tcctgacaca acccctgagc ctggactgcg gccacagctt 360
 ctgccaagca tgcctcactg caaaccacaa gaagtccatg ctagacaaag gaganagtan 420
 ctgcctgtg tgccgatca gttaccagcc tgagaacata cggcctaata ggcatgtanc 480

caacttagtg gaaaactcag ggaggtcaag ttgagcccag aagggcanaa agttgatcat 540
 tgtgcacca tggaaanaaa cttctactct tctgtcanga ngacgggaag gtcatttgct 600
 ggctttgtga gcggtctcan ga 622

<210> 3026

<211> 631

<212> DNA

<213> Homo sapiens

<400> 3026

gtgggggcgg ggaggaaagg cggcggcggc agtgtccaag ctacgccact cgggctgggg 60
 cgttgggagc gggagtgcag aacgtggtcg tggcggcggc ggtgagaaga gcgaggcgga 120
 ggaggggggtg ccatggccgg gcagcagttc cagtacgatg acagtgggaa caccttcttc 180
 tacttctca cctccttcgt ggggtcctc gtgatcccg cgacatacta cctctggccc 240
 cgagatcaga atgccgagca aattccatta aagaatatca gaaaagtata tggaaggtgt 300
 atgtggtatc gtttacggtt attaaaaccc cagccaaata ttattcctac agtaaagaaa 360
 atagttctgc ttgcaggatg ggcatgttc ttattccttg catataaagt ttccagaaca 420
 gaccgagaat accaagaata ccctccttat gaagtattaa atttgatcc tggagccaca 480
 gtagcacaaa ttaaaaaaca atatcgtttg ctgtcactta aatatcatcc agataaagga 540
 ggtgatgagg ttatgtcatg aggatacaaa acttatnctg ctttaaccga tnaaaatccc 600
 gaaaaatttg gaaaattgga atccaatngg c 631

<210> 3027

<211> 491

<212> DNA

<213> Homo sapiens

<400> 3027

gctcagctgg tagtttgacc tccgttgggtg caatgccaga natgggattg tcagccacca 60

cactgccacc accctgcaca cagtctgggt ccctccgaaa gaagcacgcc aaccttaaca 120
 tcccctacag catcttggtg cttcacacac catttaggag gccaccctaa cgaggcaaga 180
 ngacatgggg gtgtgcanaa nttctgttct tagtgagaat ggctggcctg agaatccagc 240
 tcacctcctc tgcccacagt ctggactgct tgtgggaagg ccatctcctc ctgtctggtg 300
 gtacctccac tctgggcagg ganggcctgt ctgtgactcg ctctggaccc cacttcccgc 360
 tctggccaag ggctgtcttc tgtgcacata gctcaaganc ctgcagcant tccctgtatg 420
 ggtggatgtc ctcaggggcc aanaanaaaa naatggggac aacagaaacc tgctttgtag 480
 gggattatgt t 491

<210> 3028

<211> 711

<212> DNA

<213> Homo sapiens

<400> 3028

taatagactt ttcttatca tatccctcat ttctttccct gaaataaaaa tacacacaag 60
 caaaaaaaaaa tgatagtttc acatctctta gttcccttgc ccaaacaaga atattcttag 120
 ttccactggc caggattttc ctacatagtc agaacttaca cattactaga ggcacacca 180
 ccaaggagta ttgtgtctac ttttatctgt gcaccagcca caaataccca cattggaaag 240
 acccatttgt gatgggtaaa catcccttcc tgtctccac aaccctgtg actgccctgc 300
 atgtgttcat gacctccgaa ggcccaaatt catgaagcag caaaccagc aaatctccac 360
 cccctgcct caggacctct gctgaagang gggatgaagt gggctctccan ggaagcantg 420
 ggggccttgt tggcaactct gcanttggga agggcaccgt ccggaagaaa cagnctcta 480
 cacaccccc actctactta tcatccctgc tcacacaccc ttgtccaagg ctttatgcct 540
 cggatttatt ttcccaatc cagaagnaca gtgatanatg cnttttcccc aggctgtctc 600
 aaaaaggteg ctcaatgnt actgttgtca aaattgctga aatctcccc cccttttggt 660
 ttttgagca nttaaaaatc tntccactgt nacttatttc ctctctcang c 711

<210> 3029

<211> 666

<212> DNA

<213> Homo sapiens

<400> 3029

```
gtggcttgtg gagtggcgac cgtagtgag gcggttgctg agacagacgc tggaggcggg 60
taggaggagc ccgagccgta agggaagccg tgatgagggc cgtgttgacg tggagagata 120
aagccgagca ctgtataaat gacatcgcat ttaagcctga tggaactcaa ctgattttgg 180
ctgccggaan cagattactg gtttatgaca cctctgatgg caccttactt cagccccctca 240
agggacacaa agacactgtg tactgtgtgg catatgcgaa ggatggcaag cgctttgctt 300
ctggatcagc tgacaaaagc gttattatct ggacatcaaa actggaaggc attctgaagt 360
acacgcacaa tgatgctata caatgtgtct cctacaatcc tattactcat caactggcat 420
cttgttcctc cagtgacttt gggttgtggc ctctgaaca gaantctgtc tccaaacaca 480
aatcaagcan caagatcatc tgctgcagct ggacaaatga tggtcagtac ctgactgggg 540
acagaaagtt tccttctacc agctgaatgg aaaacagatt ggaaaggatc gggcacagaa 600
ctttgaccct gctgcatcan ctactttact aaangcnaat tenttttgct ggggggtcaa 660
acaanc 666
```

<210> 3030

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3030

```
tattccaaca gtcagagta caaacaggcc gtccatgagc ttgtgcgttg cgtagcactg 60
acaagaattt gctatggaga ctacattgg aaactagcag aggcacatgt taatctggct 120
caaggctacc tccagctgaa aggactgtca ctgcaagcaa aacaacatgc agaaaaagcc 180
agacaaatcc tcgccaactc cattgtgcct ccctatagtg agaatacaga tgttttcaag 240
ttttccattg agcttttcca taccatgggc agagctttac tctcccttca aaagtatcct 300
```

tttgcctcta acttttacia atagaaatac tattcacgta acacttacac gccaagtaaa 360
aagctgatgc tgatggatga cttaggaagt gtgattggaa gtatgggagc caaggaagtt 420
caggacatgg ggtgtagaat ctagaaccaa gtggaaaatt tcctgaacac aattcagatt 480
taaggaagct gcagagaatt tgacaaaagc agagagactt tcaaaggagc tgctacaatg 540
tggaagaatt atgaaggaag aatggataga aattgaagca cggatcagat tatcatttgc 600
acaggtgtat caaggtcaga agaagtcaaa agaactttgt ccnctntcc ancactttgg 660
gaatatgtt 669

<210> 3031

<211> 568

<212> DNA

<213> Homo sapiens

<400> 3031

agatttgaag gcggcgcgcg gactaagtgc gcacttcagt tctcggagag aagagcggga 60
gtggacctgg tcagccctac cccactgacc ccaccggacc caggcgcggc ctccgccaca 120
gccacagccc ctgcccctgc tgcggcgcgcg cgaggcgagg cgatggccaa ggtgtcgggtg 180
ctgaacgtgg cggtcctgga gaacccgagc cttttccaca gccccttccg gttcgagatc 240
agcttcgagt gcagtgaaac cctggcggac gacctggagt ggaaaatcat ttatgttggc 300
tcggctgaga gtgaggaatt tgatcagatc ctagactcgg tgctgggtggg ccctgtgcca 360
gcagggaaac acatgtttgt ctttcaggcc gacgccccca acccatccct catcccagaa 420
actgatgccg tgggtgtgac tgtgttcctc atcacctgca cctaccatgg acaggaattc 480
ctcccagtgg gctactacgt ctaccacgag ttactccac cctgaactgc gtttagaaac 540
cccgccccat naaaccnna tttctccc 568

<210> 3032

<211> 671

<212> DNA

<213> Homo sapiens

<400> 3032

```
actcactggg gcttccttcc gtctcgctcg gagtttccct ctgcgttcgc tccgcgctgc 60
tggaggctgt cgtcccaatg ctccccaaac ggcggcgagc gcgggtcggg tcccctagcg 120
gcgatgccgc ttcctccacg ccgccctcga cgcgcttccc gggagtcgcc atctacctgg 180
tcgagcctcg catgggtcgc agccgccggg ccttcctcac aggcctggcg cgctccaaag 240
gcttcccgct ccttgacgcc tgcagctccg aagcgacaca tgttgtgatg gaagagacct 300
cagcagagga ggccgtcagc tggcaggagc gcaggatggc agctgctccc ccgggttgca 360
cccccccagc tctgctggac ataagctggg taacagagag cctgggagct gggcagcctg 420
tacctgtgga gtgccggcac cgcctggagg tggctgggcc aaggaagggg cctctgagcc 480
cagcatggat gcctgcctat gcctgccaac gccctacgcc cctcacacac cacaacactg 540
gcctctccga ggctctggag atactggncg agгнаааааа ctttgaaggc agtgagggcc 600
gcctcctcaa cttctgcaaa ncaacctcng tgctcaaagg ccttccagcc ctgtcacaan 660
cctgaagcaa n 671
```

<210> 3033

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3033

```
aaaaagggag agaggacaag ggtgacaagt gggggtgaga gatcaaagat ggggcgggag 60
tgtgcctagg gttgtctctc catgagtgtc ctccttccct actcttccctg ttccaggtgt 120
agcgtcggac catgtggaag tttctgaggc tggggagccg gataatgggg ggtggggccc 180
gttggggggg aaaggggcaa tagcttccct tcacaagcta acctccgctc ttcccagttc 240
tcttgactaa aatgggggaa cacattgggc ctggcaccaa tggggacttt gccccgccgg 300
agcccccgcc gagaggaacc cctgccccaa cctagggagc ttctatgagc tgcacntct 360
ntgcnc 366
```


<210> 3034

<211> 495

<212> DNA

<213> Homo sapiens

<400> 3034

```

ctggaatgag gagctgcaga cgacgagggga gctgcctcgc aagaacctgc ctgagcggct   60
gctccgagaa agggccatat tcaaggtgca cagcgacttc accgcggcag ccaccagggg  120
cgccatggcc gtcattgacg gcaacgtgat ggccatcaac cccagcgagg agaccaagat  180
gcagatgttc atctggaaca acatcttctt cagcctgggc ttcgacgtcc gagaccacta  240
caaggacttc gggggggacg tggcggccta cgtggcgccc accaacgacc tgaatggcgt  300
ccgcacgtac aacgcggtgg acgtggaggg gctgtacacn ctgggcacgg tgggtggtgga  360
ttaccgcggn taccgggtca cggccagtc catcatcccc ggnatcctgn ancgggacca  420
ggagcagagc gtcattctacg gntccatcga cttcggcaag accgtggtgt cacacccgcg  480
gtacctggan ctgct                                     495

```

<210> 3035

<211> 395

<212> DNA

<213> Homo sapiens

<400> 3035

```

taagtaacgt cagcctgaga actgagtagc tgtactgtgt ggcgcccttat tctaggcact   60
tggtgggcag aatgtcacac ctgccgatga aactcctgcg taagaagatc gagaagcgga  120
acctcaaatt gcggcagcgg aacctaaagt ttcagggggc ctcaaattctg accctatcgg  180
aaactcaaaa tggagatgta tctgaagaaa caatgggaag tagaaagggt aaaaaatcaa  240
aacaaaagcc catgaatgtg ggcttatcag aaactcaaaa tggaggcatg tctcaagaag  300
cagtgggaaa tataaaagtt acaaagtctc cccagaaatc cactgtttta accaatggag  360
aagcagcaat gcagtcttcc cattcggaat cgnnn                                     395

```

<210> 3036

<211> 568

<212> DNA

<213> Homo sapiens

<400> 3036

```

ggggctggac tggcggagca ggtgggggtcc gcggccgccg gagcgttccg gtcggcgtct 60
gggcatctcg gcctcggcag aaagcgcgac cgccctgctg cgcgggggccc gcggcgatgc 120
cgttcctgca cggcttccgg aggatcatct tcgagtacca gccgctggtg gatgcgattc 180
tgggctccct ggggatccag gaccccgagc ggcaggagtc tctggaccgg cccagttatg 240
tcgccagcga ggagagccga atccttggtc tcttgagct gctggagagg aaagcccact 300
ctccctttta ccaggaaggc gtcagcaacg ccctgctcaa gatggctgag ctggggctga 360
cgcgggcggc cgacgttctc ttgcggcatg gggccaatct caactttgaa gaccagtc 420
cctactacac ggccttgac atcgccgtcc tgcggaacca gccggacatg gtggagctgc 480
tggtggcatc acggggccga cgttaatcgg agggaccgga tccacgagag tagccccttg 540
gacctggcca nnaagacct taacncct 568

```

<210> 3037

<211> 538

<212> DNA

<213> Homo sapiens

<400> 3037

```

gtaagtccag agagtttagt gtccacacct agactggaat tgaaagacac cagcagaagt 60
gatgaaagtc caaaaccagg aaaattccaa agaactcgtg tccctcgagc tgaatctggt 120
gatagccttg gttctgaaga tcgtgatctt ctttacagca ttgatgcata tagatctcaa 180
agattcaaag aaacagaacg tccatcaata aagcaggtga ttgttcggaa ggaagatggt 240
acttcaaaac tggatgaaaa aaataatgcc tttccttgtc aagttaatat caaacagaaa 300

```

atgcaggaac tcaataacga aataaatatg caacagacag tgatctatca agctagccag 360
gctcttaact gctgtgttga tgaagaacat ggaaaagggt ccctagaaga actgaagcag 420
aaagacttct tctaattgca actgggaaga gaacactttt gattgatgaa ttgaataaat 480
tgaagaacga aggacctcng aggaagaata nggctagtcc cccnagtga tttatgcc 538

<210> 3038

<211> 483

<212> DNA

<213> Homo sapiens

<400> 3038

acgcggcggc gtgccagcct anccactcta gcgacggcgg ggaanagtgt gtacgtggtg 60
ggggcttcct cgggtggcggg catggaggct tcgcgctgcc ggctcagtcc cagcggcgac 120
agtgtcttcc atgaagaaat gatgaatatg cgacaggcta ngctggatta tcagaggcta 180
ctacttgaga agaggcaaag gaaaaagcgc cttganccat ttatggtgca gccaatcca 240
naagccangc tacgtcgggc aaagccaagg gccagtgatg agcacactcc cttggtgaac 300
tgtcatactc cccacagcaa tgtcatctta catggtattg atggccaac tgctgtcctg 360
aaaccagacg aagttcatgc tccatcagta ngctcctctg ttntggaaga agatnctgaa 420
aacaccgtgg atnctgcttc caagccagga cttcnggagc gtctccaaaa gcatgatatc 480
tct 483

<210> 3039

<211> 534

<212> DNA

<213> Homo sapiens

<400> 3039

gatgaatgcn nagggaaaagc agcttggcaa attgttatta tcaaccctta ctttgctaag 60
caagaaaact gaactgttac aagattaccc ttgaaatgtc taccacaaaa tgttggtttc 120

tataaaaagt ttggatatac tgtatctgaa gaaaactaca tgtgtcggan gtttctaaag 180
 taaaaatctt gtacgaaaat tgtcaaaggg gctaatagcta caangctaca ctcttcctaa 240
 anttgaaata ttttgttgct gcagccgant gacctccata aatactggac tgaaaaaacn 300
 ttgtaatact acnagtataa tgacntttaa aaaattactt tgggctgggtg ggacatgctg 360
 tgaattttaga ttacnaatga atattataaa ggggatgatt ttttaaccnaa ggaatatatt 420
 ttttaacttga atcttttcct gcattgtatt tttctaaan tttggcttcc tttcttggtg 480
 atccanaatt tgggttataa nganttatat gtctgctatc tgtgttgctc nttt 534

<210> 3040

<211> 593

<212> DNA

<213> Homo sapiens

<400> 3040

gcgaggcccg gtccctgcag cgggcgaaag gagcccgggc ctggagggtt gcgtaccggt 60
 cgcctgggtc cggcaccagc gccgcccagt gtggtttccc ataaggaagc tcttcttcct 120
 gcttggcttc cacctttaac ctttccacct ggggancgtc ctctaacaca ttcagactac 180
 aagtccagac ccagganagc aaggcccana aagaagtcaa aatgggggtt atattttcaa 240
 aatctatgaa tgaaagcatg aaaaatcaaa agganttcatt gcttatgaat gctcgacttc 300
 agctggaaag gcagctcatc atgcanagtg aaatgaggga aagacaaatg gccatgcana 360
 ttgcgtggtc tcgggaattc ctcaaatttt ttggaacttt ttttggcctt gcaccatctc 420
 ttttaacagct ggagcgatta aaaaaaagaa nccagccttc ctggtcccga ttgttccatt 480
 aagctttatc ctcccctacc antatgactt gggctatgga acccttttan aaagaatgaa 540
 aggtgaanct gaagacattc tggaacacaga aaanaattta ttgcnctgc caa 593

<210> 3041

<211> 689

<212> DNA

<213> Homo sapiens

<400> 3041

gaaaagctag tgaggggcgg ggcaggcggc gcggtggggg cgggccgagc ccggaggcca 60
gatgagcggg cacagcccca cgcgcggggc catgcagggt gccatgaacg gtaaggcccg 120
caaagaggcg gtgcagactg cggctaagga actcctcaag ttcgtgaacc ggagtccctc 180
tcctttccat gctgtggctg aatgccgcaa ccgccttctc caggctggct tcagtgaact 240
caaggagact gagaaatgga atattaagcc cgagagcaag tacttcatga ccaggaactc 300
ctccaccatc atagcttttg ctgtaggggg ccagtacgtt cctggcaatg gcttcagcct 360
catcggggcc cacacggaca gccctgcct ccgggtgaaa cgtcgggtct gccgcagcca 420
ggtgggcttc cagcaagtcg gtgtggagac ctatggtggt gggatctgga gcacctggtt 480
tgaccgtgac ctgactctgg ctggacgcgt cantgtcaag tgcctacct caggtcngct 540
ggagcagcaa ctggttgac gtggagcggc ccattcttcg catcccacaa cctgggcac 600
catcngcag cnanatatca acnaagaaat ttggggccaa cacagagatg catctaagtc 660
ccaattcctt gccnaaaagc atccaagga 689

<210> 3042

<211> 657

<212> DNA

<213> Homo sapiens

<400> 3042

agagagagag gaatcggacg tgggcgaggg gcggggtgtc tggactggaa cctctgggcc 60
cacatgccat ggacaatatt accaggcaga accaattcta cgatacccaa gtcacaaac 120
aagaaaacga gtcaggctac gagaggagac cactggaaat ggagcagcag caggcctatc 180
gtccagaaat gaagacagag atgaagcaag gagcaccac cagcttctc ccgcctgaag 240
cttctcaact caagccagac aggcagcaat tccagagtcg aaagaggcct tatgaagaaa 300
accggggacg ggggtacttt gagcaccgag aggataagag gggccgctct cctcagcctc 360
ctgctgaaga ggatgaagat gactttgatg atacccttgt tgctattgac acctataact 420
gcgacctcca cttcaaggtg gcccgagatc ggagtagtgg ctatccgctc acaattgagg 480

gctttgcata cctgtggtca ggagcccgtg ccagctatgg ggtcagaang ggccgtgtat 540
gcttcgagat gaagatcaat gaggaaatct ccgtgaagca cttccgtcta cagagcctga 600
ccccacgtg gtccgtatcg gctggtccct ggactcctgc aacacccann cttnggc 657

<210> 3043

<211> 526

<212> DNA

<213> Homo sapiens

<400> 3043

gtacgtggcg cgcggtccg gcgggcggtt ggcttgagcg ggaccggagc tgaggcagga 60
agagccggcg ccatggtgga gaaggaggag gctggcggcg gcattagcga ggaggaggcg 120
gcacagtatg accggcagat ccgcctgtgg ggactggagg cccagaaacg gctgcggggc 180
tctcgggtgc ttcttgtcgg cttgaaaaga cttggggctg aaattgccaa gaatctcatc 240
ttggcaggag tgaaaggact gaccatgctg gatcacgaac aggtactcc agaagatccc 300
ggagctcagt tcttgattcg tactgggtct gttggccgaa atagggtga agcctctttg 360
gagcgagctc agaatctcaa ccccatgggtg gatgtgaagg tggacactga ggatatagag 420
aagaaaccag agtcattttt cactcaattc aatgctgtgt gtctgacttg ctgctccann 480
gatgtcatag ttnaagtgga ccagatctgt cacaaaaata gcatca 526

<210> 3044

<211> 510

<212> DNA

<213> Homo sapiens

<400> 3044

gtgctttccc aagcctggaa naatcgtcat gctctttgta gcgtggtgct tctgttgctc 60
acagangtgc ctgcttcccc ttctgccatg attggaagtt tcctgaggcc tccccagcca 120
tgtggaactg acaacttgcc tttgatgatt ttcaaganag ttgtgctatg atgtggcaaa 180

agtatgcagg aagcaggcgg tcaatgcctc tggaacaag gatccttttc cacggtgtgt 240
 tctatgccgg gggctttgcc atttgtntt acctcattca aaagtttcat tccagggnntt 300
 tatattacaa gttggcagtg gancagctgc agaaccatcc cgangcacag gaagctctgg 360
 gccctcctct caacatccat tatctcaagc tcatcgacag ggaaaacttc gtggacattg 420
 ttgatgccna gttgaaaatt cctgtctctg gatccaaatc agaaggcctt ctctacntcc 480
 actcatccan aagtggcccc ttctennaagt 510

<210> 3045

<211> 602

<212> DNA

<213> Homo sapiens

<400> 3045

aaaaaaaaa aaaaaaagag cctggggccc aggactgcag cggttcgga aggtgggctc 60
 tgccagcggg accatgctgc tccgagccgc ttggaggcgg gcggcagtg cggtgacagc 120
 ggctccaggg ccgaagcccg cggcgcccac tcgggggctg cgcctgcgcg ttggagaccg 180
 tgctcctcag tctgcggttc ccgcagatac agccgctgcc ccggagggtg gccagtgct 240
 gcgacctctc tatatggatg tgcaagctac aactcctctg gacccccggg tgcttgatgc 300
 catgctccct tacctaatac actactatgg gaaccacac tcccggacac atgcttatgg 360
 ctgggagagt gaggcagcca tggaacgtgc tcgtcagcaa gtagcatctc tgattggagc 420
 tgatcctcgt gagatcattt ttactagtgg tgctactgaa tccgacaaca tagcaattaa 480
 ggggggtggc cgattctaca ggtcacggaa aaagcacttg atcaccaccc agacagaaca 540
 cnaatttttc ttggactcct gccgttcctt ggaaacttaa ggctttcang tccctncctc 600
 cc 602

<210> 3046

<211> 607

<212> DNA

<213> Homo sapiens

<400> 3046

```

ttatgtatac tcaacattgt cttttctcca ttcgtgttgg tcatcatagt tttttctaca   60
ctactctctt ctcccttact ccctcttttc acccttcctg tgttcttggg ggggtttccc  120
cgacctattc agagttggcc aggagcagca ggcaccacag cctgtgtgtg tgcagataca  180
gtgtactact accaaatggg gccaggttg actgctgtac tgcagactgc aatggcagct  240
ggaagtttag gtctctcct acctggatct cattacttgg gccgttttca ggatcgttta  300
atgtggataa tgattctgga atgtggctat acttactgct ctattaacat taaggggtta  360
gaattgcagg aaacatcctg tcatactgca gaagctcgca nagttgatga agtttttgaa  420
gatgcttttg aacaanaata cacaagagta tgttccctta atgaacactt tggaaatgtc  480
ttgacaccct gtactgtttt gcctgtgaaa ttgtattctg atgccaggaa tgttctatca  540
ggcataattg atctcatgaa aactttaaaa naatttaaag gtgaactcat taaantacnt  600
gtgtgga                                           607

```

<210> 3047

<211> 495

<212> DNA

<213> Homo sapiens

<400> 3047

```

gCGgggggctg aggggctgcc atggcgggcg cgggccggct cccgagctcc tgggccctct   60
tctcgccgct cctcgcaggg ctgtcactac tgggagtcgg gccggtccca gcgcggggcg  120
tgcacaacgt cacggccgag ctctttgggg ccgangcctg gggcaccctt gcggctttcg  180
gggacctcaa ctccgacaag cagacggatc tcttcgtgct gcgggaaaaa aatgacttaa  240
tctctttttt ggcagaccan aatgcaccct attttaaac caaagtaaag gtatctttca  300
agaatcacag tgcattgata acaagtgtan tccctgggga ttatgatgga aattctcaaa  360
tggatgtcct tctgacatat cttcccaaaa attatgccaa naatgaatta ngaactgtta  420
tcttctgggg acaaaatcaa acattataat ctaacaatat gaccatactc nataagactt  480
ttcaanatna ccact                                           495

```


<210> 3048

<211> 659

<212> DNA

<213> Homo sapiens

<400> 3048

```
cattactana aagaatctta caaacaaagt tgaaggatat agtttctttg gtcccacgcc 60
tgcggcacat catcactgtt gatggaaagc caccgacctg gtccgagttc cccaagggca 120
tcattgtgca taccatggct gcagtggagg ccctgggagc caaggccagc atggaaaacc 180
aacctcatag caaaccattg ccctcagata ttgcagtaat catgtacaca agtggatcca 240
caggacttcc aaagggagtc atgatctcac atagtaacat tattgctggt ataactggga 300
tggcagaaaag gattccanaa ctaggagagg aagatgtcta cattggatat ttgcctctgg 360
cccatgttct anaattaagt gctgagcttg tctgtctttc tcacggatgc cgcattgggt 420
actcttcacc acagacttta gcagatcagt cttcaaaaat taaaaaagga agcaaanggg 480
atacatccat gttnaaacca aactgatgg cagcagttcc ggaaatcatg gatcgggatc 540
tncaaaaatg tcatgaataa agtccgtgaa atgaatantt ttcaccgtaa tctgtttatt 600
ctgggcctat nattaccaaa tggaacanat ttcaaaaanga agttntactc cactgttgc 659
```

<210> 3049

<211> 728

<212> DNA

<213> Homo sapiens

<400> 3049

```
ttcaaatgtg atgagtgcgg aaaggccttc agtcagagta cgagcctctg catccaccag 60
agagtccaca caaaggagag aaaccatctc aaaatatcag ttatataaaa cgttttgcta 120
agagtttaaa atcttaaaac ccataagtgc cactaggaag gaaaccctgt atatacctac 180
attgacccaa gaaatattta cgcaatccct agcagaacat tgtttctgag gaggcataat 240
```

tgagattgat ttgttggttc atgccaagtg tgttccacag gttgactttg aatgtggacc 300
 tctgagcatc cacgcaggat ggctctcagg tcccagtcac agacgtcgct tcctgggatt 360
 ccagcacgat gcctccatag ttgaaagact acacaaaaag ccacaatcat tgcccggcct 420
 cctgagtcac cttctatcta tacttttgctt aaaagctatc ccagatactc ccccttgggg 480
 agctcatgcc cttccttcct ctttattcga gcatactggc aatgcattgg gaaaacagac 540
 agctcccact aagatcacgt tctgggtatt ctgaagttaa cacttgattt agcccctaca 600
 tatctttcca tatatcctat tatttctgaa tatatgtcct ccaaattccc ataaatatcc 660
 ntcccttcct anatnggctt taactttcat tttaaatttt aggtgactcn taattcccat 720
 tcccttng 728

<210> 3050

<211> 602

<212> DNA

<213> Homo sapiens

<400> 3050

tttacaagga tctaaaagga acaggattaa agatgactga atactgggtt ccagaaattt 60
 aaaacaatca gcttagcaaa tcatatatc tttctgtggag ctgagaattg atgtccgctc 120
 ttccccgtga ttggaactt tccaatccca gagaaaagtt gacaaaggga ctgcccagga 180
 ctgagtccat atggaagaag aacttcctct tttctctgga gacagtggca agccagtaca 240
 ggctactctg tcatctttga agaagttaga tgtgggaaag tggccaattt tttccctttg 300
 ttctgaagaa aaactacagt taattcgta ggcttgtgtc tttggcagt ctggcaatga 360
 agttttatac actacagtna atgatnagat ttttgtgctt ggcacaaact gctgtggctg 420
 tttgggggtta ggtnacctcc agagcaccat tgaacctcgg anactggatt ctttanatgg 480
 caaaaaaata ccctgcctca gctatgggan tggccacat attgtccttg cacaacagaa 540
 ngaaaatctt tacctggggt cctaattgctt ataccgctt ggccatggng acaactantc 600
 nt 602

<210> 3051

<211> 670

<212> DNA

<213> Homo sapiens

<400> 3051

```

acttgtaaac attcctatga ttgttactaa aatgtatfff catgtttaaa atgtttttgg 60
atattttggg ttaataacta ctacattgaa ttgcatgtta aggtgcanaa ataatacatt 120
aaaagatfff cactttaaat taattagtaa tattgagcgc tcaccctgtg cgtggccttg 180
tgctaaccat tagcactgca tcatttcaat tcttttataa gggcattcaa tactacaaaa 240
tcaacatgat ttcataaggt gcaaataaaa gttggtgaca gatttaataf aattttgatc 300
acaatttaca aatgatcttt gcaaatagtg gtcagacggc attagttfff cccttagtta 360
agctaaatta aagggactcc ctctgtttat gattatatta ttattattat tattattatt 420
tttgagggtg agtttcactc ttgttgccca agctggagtg caatggcgcg atctcggtc 480
accacaacat ccgcctcctg ggttcaagcg attctcctgc ctacgcctcc tgagtatctg 540
ggaatacang catgcgccac tacacctggc taatttttgt attttttagtt ganatngggt 600
tttccacntt ggtcaggctg gtctccaaac tcctgacctc aggtgatncc gtccacctca 660
ncctcccaaa 670

```

<210> 3052

<211> 626

<212> DNA

<213> Homo sapiens

<400> 3052

```

tgtgaagtca actttatccc agacagttcc atccaagggg agaattaagt agagaaattt 60
gtctgcaatc tcaatctaaa gacaaatcta cgacaccagg aggaacagga attaagcctt 120
tcctggaacg ctttgagag cgttgtcaag aacatagcaa agaaagtcca gctcgtagca 180
caccacacag aacccccatt attactccaa atacaaaggc catccaagaa agattattca 240
agcaagacac atcttcatct actaccatt tagcacaaca gctcaagcag gaacgtcaaa 300

```

aagaactagc atgtcttcgt ggccgatttg acaagggcaa tatatggagt gcagaaaaag 360
 gcggaaactc aaaaagcaaa caactagaaa ccaaacagga aactcactgt cagagcactc 420
 ccctcaaaaa acaccanggt gtttcaaaaa ctcagtcact tccagtaaca gaaaagggtga 480
 ccgaaaacca gataccagcc naaaattctn gtacagaacc taaagaagtg atacgtgaaa 540
 ttgagatgaa tgtggatgat gatgatatcc atagttcgaa agttattnat gaactcttcn 600
 gtgatgttct anangaangt gaactt 626

<210> 3053

<211> 483

<212> DNA

<213> Homo sapiens

<400> 3053

aggaatggaa gtgaggagag aggagaggag aaggggacca gctctccgga ctatcggcac 60
 taccttcgaa tgtgggccaag ggagaaagag gctcagaagg agacgattaa ggatcttccc 120
 aagatgaacc aggagcagtt catttgagct gtgcaagacg ctttacaaca tgttcagtga 180
 agaccccatg gagcaggacc tgtnccacgc catcgccacc gtggccagcc tctgtctccg 240
 catcgagag gtggggaaga agttctcagc ccgcacaggc aggaagccca gggactgtgc 300
 cactgaggag gacgagccac cagcaccga actgcatcag gacgcancca ggggagcttc 360
 nccccccagc tgcaggagac cccaagcca aagcaggcgg agacacaccc ctcggaacag 420
 cccacagga aaaccangtt gtggtggaag ggggcancng cnaaggacan ggctcaccct 480
 ccc 483

<210> 3054

<211> 411

<212> DNA

<213> Homo sapiens

<400> 3054

gactgcagag ccggggctgg gctangcgcg cgcttggaga gcattgcgcg cggctggggcc 60
 cgcggccggc ggctcctcct cccactctgc tcctcctctt tttctcctc ctccgcctcc 120
 tcctccgcct cctcctcctc ctcttctctc tcctcttcaa ttctcccggg ggctcgactc 180
 ggctcgcagg cttcggagaa acccctactc cagtgcgcca ctcagcgccc aagaggggtcg 240
 ccttgggctg ggggcgcacc ccaggaggagg gaggggtcca ggcagctggg ccgccgcgga 300
 cacctagcgg cttcagggtt aatcccgacc gcagccgtcg ccgcctcggg canattttgc 360
 gcccttgctt tgcgccccgg gcgctgaagc cgggcgggcg attttnactg n 411

<210> 3055

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3055

ttttacaaaa cgctctcctt gttgaagaag aaggaccccc gcatttatca gaaagatgcc 60
 accttctata acagaacagc atcgatcatca gacagtgagg aggaccacaga agccttggag 120
 aagcagaaga aagtgcggcc catgtacctn aaggactacg agaggaaggt tatcttggag 180
 aaggcaggca aatatgttga tgaggagAAC tcagacgggg agacttccaa tcacagactc 240
 caggagacat cgtcgcaaag ttatgtggag gaacagaaac agctcaagga aagcttccgg 300
 gcatttgttg aggacagtga ggacgaggac ggcgctgggg agggcggtc cagtttgctg 360
 canaaacgtg ccaaaaccag gcaggagaag ccaggaggga ggccgactac atcgagtggc 420
 tgaagggaca gaaagagatt cggaacccan attccctgaa ggaactgacg cntctcaagg 480
 aatactggaa cgaccctnaa ttggatnaan ggga 514

<210> 3056

<211> 527

<212> DNA

<213> Homo sapiens

<400> 3056

```

caatgttccc gagcctgatg gacatatcat atcaccactg ttggcaggat tttatatgtt   60
ttggaccatg atcattttgt tacaggctctt gattcctatt tctctctatg tttccatcga  120
aattgtgaag cttggacaaa tatatttcat tcaaagtgat gtggatttct acaatgaaaa  180
aatggattct attgttcagt gccgagccct gaacatcgcc gaggatctgg gacagattca  240
gtacctcttt tccgatnaga caggaaccct cactgagaat aagatggttt ttcgaagatg  300
tngtgtggca ggatttgatt actgccatga anaaaatgcc aggaggttgg agtcctatca  360
ggaagctgtc tctgaagatg aagattttat agacacagtc ngtggttccc tcagcaatat  420
ggcaaaaccg anagcccccga gctgcaggac agttcataat gggcctttgg ggaaataagc  480
cctcnaatca tcttgctggg anctctttta ctctnggaag tgganaa                    527

```

<210> 3057

<211> 572

<212> DNA

<213> Homo sapiens

<400> 3057

```

aataaagcta agctgcgtgg gtaacttctt tttagttata taacagagtg ttatatgatt   60
ttttatgttc acctgctaag aacatatacg tttgaaatgt gtgatattgt taacgtttnn  120
ccttgagaag atatatggaa tagatcttac gatcccatth tgatctgttt cttgcagaat  180
gcagttcttc atgttcagtt caattaaaag atgtttgaaa tggctctaate tggctggcct  240
ctttggagca atgagcgtht gttttgttga atgagggact gaatgatgat ttagttactc  300
agctaatacta gtgtcctgag aaaaatgtga gttgttattg cctctgaaga gtaaaccgth  360
cactactgct gttccagaat gtttggactt aagacagtht gttgagagag atagaagatt  420
tggttaggth tagactttcc acctgccggc tcgcattaac agcagtgagg gtggcgagga  480
ctgccttatt tggcgcgctc ccnatgttcc aggcacactg ctttggtgct ttaanangct  540
gcttcacgta atctccccng cagcctcaga na                                572

```

<210> 3058

<211> 487

<212> DNA

<213> Homo sapiens

<400> 3058

```

ggactgagca ccttcgactt ccgcacgggc aagatgctta tgagcaagat naacaagagc   60
cgccagcgcg tgcgctacga ctctccaac caggtcaagg gcaagcccga cctgaacacg  120
gcgctgcccc tgcgccagac ggcgctccatc ttcaagcagc cggtgaccaa gattaccaac  180
caccacagcn acaaggtcna gagcgacccg cagaaggcgg tggaccagcc gcgccagctc  240
ttctgggana agaagctgag cggcctgaac gccttcgaca ttgctgagga gctgggtcaag  300
accatggacc tccccnnggg cctgcagggg gtgggacctg gctgcacgga tganacgctt  360
ctgtcggcca tcgccagcgc cctgcacact agcaccatgc ccatcacggg acagctctcg  420
gccgccgttg aaaanaaccc cggcgatatg ctcaacacca cgcanccct gtgcnaagct  480
tcatggt                                           487
    
```

<210> 3059

<211> 530

<212> DNA

<213> Homo sapiens

<400> 3059

```

agcgaccgaa ctctggcggt ggtggttaag acggcnaagg cggcagcggc ggcnaacagct   60
ctggggtttg cgtctcgggg tgtgtcggcc gccgctgctg cttgggcctg gtatgtacag  120
atggctgggt aggattctcg gcaccatttt ccgtttctgc gaccggtcgg tgccccctgc  180
ccgggccctc ctgaagaggc ggcgctcaca cagcactctg ttttctacag tggacactga  240
tnaaatacca gccaaaagac caagattaga ttgctttatt caccaagtga aaaacagtct  300
ctacaatgct gccagcttat ttggattccc attccagctg accacaaagc ccatggtaac  360
ttctgcttgt aatggaacac ggaatgtggc cccitcagga naggtatitt cgaactcttc  420
atcttgtgaa ctgacaggtt ctggatcctg gaaacaacat gctnaaactg gggtataaat  480
    
```

ctcctaattg aataagtac tatccnaaga tcagagtac agttncacca 530

<210> 3060

<211> 575

<212> DNA

<213> Homo sapiens

<400> 3060

gatccggaag tcggagccta gctgcgcgag agtttctgct cgctcaaccg agttgtcgtg 60
 ttgccctcgc ttctcagatc cccgccggaa gtgaagagag caagcagatt tgaacctatc 120
 tgctttcaag ctggtcatca tgatgaaact tagacacaaa aataaaaagc caggtgaagg 180
 ttccaagggc cacaagaaga taagttggcc ctaccctcag cctgcaaagc aaaatgggaa 240
 gaaagcaacc tccaaagtgc cctctgcacc tcattttggt caccccaatg atcatgccaa 300
 tcgagaggct gaattaaaga agaagtgggt tgaggagatg agggagaagc agcaagccgc 360
 ccgggagcaa gaaagacaaa aacgcaggac cattgagagc tactgtcagg atgtcctaag 420
 acgccaggag gagtttgagc ataaggagga agttttgcag gaattaaata tgtttcctca 480
 gctggatgac gaggccacga ggaaggctta ttacaaggag ttccgtaagg tgggtggaata 540
 ctctgatgtg attctggaag tcctggatgc ccnnn 575

<210> 3061

<211> 704

<212> DNA

<213> Homo sapiens

<400> 3061

aattttcaen tatttccttc aacgtccaca gctgaatcct caccagctgc taatgtttct 60
 gtaatggatg gaaagatgca accaaacagc tttccgtggc agtccccctt accatgcagc 120
 aatagcctcc ctgcaacgtg cacaactggc cagagtaaag tggcagcctg gttacaggac 180
 tcggaagaga tggacagggt tgcagaagat cttgcacatt gccagtcaaa ccttgtggaa 240

cttagcaaac tcctgcaaaa ttggaataa cttcaganaa ctcagtcagc acctaacttt 300
 actgacatgc aggctaactg tgtanatatt tcaaagaaag acaagcgggt cacaagacga 360
 tggagaacaa aagggtgcag caaagataca aaaatacaac tgcaggttcc tttcagtgct 420
 accatgtcac cagttcgctt gcattcctcc aacccaacc tttgtgcaga tattgaattt 480
 cagactcccc ctagccacct cactgaccct ctggaaagtt caacagatta tacaagctg 540
 caagaanaat tttgtctaata ccgcacagaa aagtttggnc cnattttttt cctccttttt 600
 ttggaaaagt tctgccattt aaataagcca tangctatta gaaaaaggag aagctgaaag 660
 ccaanatggt ttccgaagca ggatcacant taaaanggcc acan 704

<210> 3062

<211> 465

<212> DNA

<213> Homo sapiens

<400> 3062

ctctggcngg tggcgggtgtt gaaggcgaaa gcttgcttgg cccgtgtcgc ttctgtccca 60
 agaaccggac ggagagttag ggcacgaggg tcgctgtcgg gggctgtcgt cttccacgta 120
 cacgtcgtcg tgaggagcgc agtccggact cttcccgcaa cccctccggc tccctttccg 180
 cagcctcga ggcggcggcg gccaccgaga cagcagcgca ccttccccca tcccttcccc 240
 ttatccccca gcccaaaagg gcccggtctg cgccccaccc ccgcccgtcc gcccgctacg 300
 ccgcccgcct gtcggcgcan gcccanatgc gcgcgatgct ggaccagttg atgggcacct 360
 cccgggacag anatacaact cgtcaacgaa tcnaattcag tgatgacaga gtatgcaana 420
 ntcaccttct caactgttgt cctcatnatg tcctttctgg aacta 465

<210> 3063

<211> 684

<212> DNA

<213> Homo sapiens

<400> 3063

```

cttccgggga ccaggcccg c ttttggtgc atcagccggg gattgccggc gccaggcatc 60
tgcatctggg accgacctcc tgggctggct gatcaaagag gaagcagcag caatgtctgc 120
tgtgggggct gcaactccat acctgcatca tcctggtgat agtcacagtg gccgagttag 180
tttcttgggg gccagcttc ctccagaggt ggcagcaatg gcccggtac taggggacct 240
agacaggagc acgttcagaa agttgctgaa gtttgtggtc agcagcctgc agggggagga 300
ctgccgagag gctgtgcagc gtcttggggc cagcgccaac ctgccggagg agcagctggg 360
tgccctgctg gcaggcatgc acacactgct ccagcaggcc ctccgtctgc cccccaccag 420
cctgaagcct gacatcttca gggaccagct ccaggagctc tgcatcccc aagacctggt 480
cggggacttg gccagcgtgg tatttgggag ccagcgcccc ctcttgatt ctgtggccca 540
ncagcagggg gcctggctgc cgcatgttgc tgactttcgg tggcgggtgg atgtacaatc 600
tccaccagtg ccctggctcg ctccctgcan ccgagcgtcc tgatgcactg aaactttcag 660
atgggtccnc atnccgcttt tgaa 684

```

<210> 3064

<211> 693

<212> DNA

<213> Homo sapiens

<400> 3064

```

ggaaaaaaat gagagacctc tgcctacaaa acctcaaacc agtcactttt gtcaattgct 60
aatacccgat tacttatgat ttaaaaacaa ccaacagaaa acatcccact gactgtatgg 120
cactctatag tcaaaaaagg aaacttcctt attgggactt ttctttctta gtccagttgt 180
gttgacacat atgaacacag acaaagtgt atgcgganga aagcaagtgt tggtcagtag 240
tttcatgttt tagggagtgg ttctgtgga natcagaaag tgacatttgc tttcgggtact 300
gtaatacgtg caccaaactg cctcaatcct aggtaacgag ggcaacaggg agcacctgtc 360
tggattgttt ttaaacctcc atactcaagc tgtctcttcg gcagggangt gaatactctt 420
gaaaggccaa cancaagtgt ttgtgggaca caacacagat aatTTTTTct taagtcggcc 480
aanatgtact tctctgtgtg cacacccatg cacactcatg cacacagata catangtctg 540

```

tatggctgta tttgctgttg attcanactt tcacaccatt aatggggaaa agcgtggnca 600
caaaaacana tgctaggaan cttggcttcc tcttcttggt gacctttttt gaaccaacct 660
cttttttatt atattcanaa tatgttttta ant 693

<210> 3065

<211> 516

<212> DNA

<213> Homo sapiens

<400> 3065

gtccggcgcg cagagganga ngagaaagct gaccgcttag gcccggttag tggtcgtcgt 60
ggttttcctt gtagttcgtg gtctgagacc aggcctcaag tggaaacggc gtcaccatga 120
tcgcacggcg gaacccagaa cccttacggt ttctgccgga tgaggcccgg agcctgcccc 180
cgcccnagct gaccgacccg cggctcctct acatcggctt tcttgggcta ctgctccggc 240
ctgaattgaa taacttgatc cggcggaagg ccaatccna acgggtggtt tgcattccca 300
gcttctatat atttacnggc cttttttttt ggctgggaat attatccttg ttaaaacttt 360
aaaaactaac ctgttttgct ttgaaggga cctgaaatt tttgggaata ttttgaatt 420
tccttccan aaggaatttc cctgaaaaaa aaataanaaa accttttggt gaaatttttt 480
aaaaattccc nccattcct ttaaatntc caaatt 516

<210> 3066

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3066

tacaccacat gcagtttaca tctgtcttaa ctactccttc ccaggtaaatt tccaattata 60
tttgacatcc agctaagang gcccatctct tctcacctct ttcctagtca gtatattcag 120
caaatatatta ttgagccctt actgtgggca aatcattgta ctggataatt gagaaaaata 180

gataattccc ttattcagta aatgtctact gagcacaatc tagtgaatca ttacagtatg 240
gcctcattgt tttgtttgag gtgtgttatt cataacaata ttttacacca ttcgtatcaa 300
tgtaattata gaacacaata tacgatcaag gataagtaat tgtgtggta tctgccattt 360
aaaagtatcc agtatttgat cacattatta tatataatga aaaaatgatt taatctgtaa 420
taaactgggtt tattgtgcag tgactgtaat atactaaagt tataataaat tgtttactct 480
gcctcaccaa acacatgcta ggatataacc cccaaaataa gtattttaact ttgcattagg 540
tataaagnga nactgggtgc tataattaaa ttatittgag gcagacagaa anctgttatt 600
ctaactgatt taatatgttc tgtaattgaa aaaatgttca ccaaattata ctttttagtg 660
atttacatgt tacattttat aggggacatg ttctgtttnt anccaataaa taacttttat 720
agtatcacia aatgtttttg gatccctaatt ttcttattaa gaatatgaag tttcttacct 780
ataccttgat tntcccatt tgaatttgc nctttttgcc acataactaa acnttccatt 840
ttaaaattaa ctaaaaatcc tggaaattga anttnaacct tt 882

<210> 3067

<211> 482

<212> DNA

<213> Homo sapiens

<400> 3067

ggaaggcgcg cgcgcttagg caggcggtgg cgcggtgga gtgccgcggg gagggctgtg 60
ccggttgctt tctgcagccg catctcgcc agctctctc gccgtccccg gggcgctgtg 120
cgtctccagt ccgggaccga agccgcctgc cgtagcgggc ggccanattc gcgtcccgcc 180
tcagcgcccg gaggacatgc gggagagaga atgagccaga gggacacgct ggtgcatctg 240
tttgccggan gatgtggtgg tacagtggga gctattctga catgtccact ggaagttgta 300
aaaacacgac tgcagtcac ttctgtgacg ctttatattt ctgaagtcca gctgaacacc 360
atggctggag ccagtgtcaa ccgagtnntg tctcccgac ctcttcattg cctaaaggtg 420
atcttgga aaagaaggcc tcgttccttg ttanangac tangcccaa tttagtgggg 480
gt 482

<210> 3068

<211> 664

<212> DNA

<213> Homo sapiens

<400> 3068

```
gtataaatcc cagctgatcc gcggcttatt agagaacaac ctgggagAAC ccatagagga 60
atttatgcgg ccttatgatt tacaagatcc aagaattcat actgtcctga gtggagaagt 120
gtacacctgt atgtgcttcc tcattgatat ggtgaatgta agtctggagc ttaaagatcc 180
aaaaagaaaa gaaggtgctg ggtccctagc cagatttgac ttcaagaaat gcaaactgct 240
ctatgaaagt tttccaacc aaaccaagtc cattaacttg gtttcccatt ccatgatggc 300
ttttgacacc cgttatgctg ggcagaagac cagccctggc atgacgaatg tggtcagctg 360
tatctttcag cccgctaaga acagcagcac cacccaaggg tccattcaga ttgaactaca 420
tttcagatct accaaggatt cctcctgctt tacagtagtt ctcaacaatc tccgtgtgtt 480
tctcatatTT gactggctac tgttagtcca tgattttctc cacactccca gtgatattaa 540
gaaacaaaaat catgttactc cttctcgcca ccgtaactct agcagcgaat ctgctatagt 600
tcccaaaaact gtgaagantg gantanttac caagcggctc ccttccctgt gttcaatgaa 660
aggc 664
```

<210> 3069

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3069

```
aaagctagtt gagagagcat actctggttt ttcattcttc acagtagtca aagaagttac 60
atatacaatt agaatttggt gtttctgttg ccagaaactc aatacaattt gtcacatcag 120
gaaaggTTTT ttgttggtat tggtgtgtgt ttgagacgg aatttcactt cactcttggt 180
gcccaggctg gaggTcaatg gcgcgatctc ggctcaccac aacccccacc tcccaggttc 240
```

aagcgattct cctgcctcag cctcccaagt anctggaatt acaggctttg tcactacgcc 300
 tggctaattt tgtattttta gtagagatgg ggtttctcca tgttggtcct gctgggtgcc 360
 aactcccaac ctcangtgat ccgcctgcct cagcctccca aagtgctgcg attacaggcg 420
 tgagccactg cacctggccc aggaaaagtt tttacatac gaattaaaga tgcttcttta 480
 tgcaaatttt taaaccccag gtttgaagta ggataaaagg taacattaaa tctganatca 540
 tttctagctc tggaattctg tgattgtaat ganttttgat ttctaaatgt tttttccttt 600
 cataatttca gggtttagtca gcaacataaa ntcncctaa tgacagcaga naacttatcc 660
 atctgttttt gggccacctt tgaagaaaac tgattttgaa aaatcganan tttctgtcta 720
 ctactaaaaa tcctcnntct gttg 744

<210> 3070

<211> 740

<212> DNA

<213> Homo sapiens

<400> 3070

gtgcgtacgt gcgtcgtctc tatgggtggcg gcggatttgg agggacccta cgaaccagga 60
 gtcaggcgag ccgatctggg gctgcaggat gttccgctgg gagcgctcca tccccctgcg 120
 aggctcggcc gccgccctgt gcaacaacct cagtgtgctg cagctgccgg ctcgcaacct 180
 cacgtatittt ggcggtggtc atggaccaag cgcccagctt ctcagcgctg ctcctgaggg 240
 tgtgcccttg gccagcgcc agctccaacgc taaggagggt gctggagtga gtccccact 300
 tatactcag gtccactggt gtgtcctccc cttccgagtg ctgctggtac tcacctcaca 360
 tcgaggaata cagatgtncg agtccaatgg ctacaccatg gtctactggc atgcaactgga 420
 ctctggagat gcctccccag tacaggctgt gtttgcccgg ggaattgctg ccagtggcca 480
 cttcatctgt gtgggaacgt ggtcaggccg ggtgctggtg ttgacatcc cagcaaaggg 540
 tcccaacatt gtactgaacg angaactggc tgggcaccan atgccaatca cagacattgc 600
 caccgaacct gcccgaagga acaggattgt gtggctgaca tgggtgacngc aaataactcc 660
 aggcttgctt ttgtttctgg cgggccaggg ncaaaaattc ncanttatg aaccccattn 720
 ccaagaattt gggaatttcc 740

<210> 3071

<211> 725

<212> DNA

<213> Homo sapiens

<400> 3071

```

gaacaaggga aatgagcaaa gtaagaagac accaattgag aaatctgatt ttgctgctgc 60
tacacatcct cgtgcttttt acctcagtaa accagatgaa actccaaatg cttggatgtc 120
tgattcagga acaggattga cttactggaa actagaggaa aaggatatgc accactcttt 180
gcctgaaact ttagagaaga cgttcatatc attgtcttcc acagatgtgt caccaaacca 240
gtctaatact agtaatgaga tgaagctacc gtcactgaag gatatttatt ataaaaaaca 300
aagggaaaac aagcagttac ctgagaggaa tctcacttct gcttccaacc caaatcatcc 360
accagaggtc ctgactctag atcctacgtt acacatgaag ccaaagcagc agatttcagg 420
gattcaacct cacggccttc cgaatgccct tgatgacaga atatcctttt ccccggtc 480
tgttctagag cctagtatgt ctagtccttc tgacatagac tcattttcac aagcaagtta 540
tgtcacttct cagttacctg gatttccaaa atatccctca cacacaaaag cttctccggt 600
gggactcttg ggaaaaatcc gacttccnaa acgaaagttg gaacagttcc ncctttccgt 660
ccgtttntnc ccttactagt tatgatatct cccgtccacc ctgttaatta aaaaaacact 720
gtcnt 725

```

<210> 3072

<211> 633

<212> DNA

<213> Homo sapiens

<400> 3072

```

agagcggccg cggtcctccc gcacctgagg ccatggatga ggagcgcgcc ctctacatcg 60
tccgggcccg cgaagcaggg gctatcgagc gggtcctgag ggattacagc gacaagcata 120

```

gggctacttt caaatTTgaa tcaacagatg aagataaaag aaagaaactc tgtgaaggca 180
tatttaaagt ccttataaag gacatcccaa caacatgtca agtgtcctgc ctggaagtac 240
tccgcattct ctccagagac aaaaaggTTt tagttcctgt gacaactaag gaaaatatgc 300
agatactgct gcgactagcc aagctaaatg agttagatga ttctttggag aaagtatcag 360
agttcccagt tattgtggag tcattaaaat gtctgtgtaa tatagtgttc aacagtcaga 420
tggcacagca gctcagcctg gaacttaatc ttgctgcaaa gctctgtaac ctctgagaa 480
agtgcgaagga ccggaattt atcaatgaca ttaagtgtt tgacttgcg ttgctcttcc 540
ttctgtcact tttgcacacc gacatcaggt cacaattgcg ctatgagctc cagggactac 600
cgctgctaac gCGaatcttg gaaantnnct tta 633

<210> 3073

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3073

cgatgaattc agccgaatcc caagaaccat atcgagccct gctgctaccc aagccagtgt 60
ccccgacgac agcagttccc ggaggtgcag cgcgcctggg gcgagcccga aggagaggca 120
tcctgacagc cgccagcggg agagaggtgg aggccccaag aagccgtgga aatgcgggga 180
ctgcgggaag gccttcagct actgttccgc gttcatctta caccagagaa tccacaccgg 240
ggagaagcca tttgcgtgcc ccgagtgcgg caaggccttc agccagagcg tgcacctgac 300
cctgcaccag cgcacgcaca cgggcgagaa gccctacgcc tgccacgagt gcggcaaggc 360
cttcagccag ggctcgtacc tggcgtccca ctggcgcacg cacacgggcg anaagccgca 420
ccgctgcgcc gactgcggca aggccttcac gcgcgtcacg cncctgaccc agcaccggcg 480
cgttgcacac gggcgancgg gcctacgcgt gcgccagtg cgccaaggcg ttccgcaacc 540
gctcgtccct gatagancac cancgcatcc acaccgtga gaaccctacc aattgctccg 600
cgtgcgccaa ggccttccgc ttctcctcag cgctcatccg cccaccancg catccacag 660
gaaggaaaaa ccctaccgcc tncggccaat gcgccnaggg ctccncgca aaattnc 717

<210> 3074

<211> 508

<212> DNA

<213> Homo sapiens

<400> 3074

```
tctcagaaat aatctcatcc atatccgatg taaaattcag tcatagtggg cggtacatga 60
tgaccagaga ctacctgtcg gtgaagggtg gggacctcaa catggagagc aggccggtgg 120
agacccacca ggtccacgag tacctgcgca gcaagctctg ctctctctat ganaacgact 180
gcatctttga caagtttgag tgttgctgga acggttcgga tagcgccatc atgaccgggt 240
cctataacaa cttcttcang atgtttgata gagacacgcg gagggatgtg accctggagg 300
cctcgagaga gagcagcaaa ccgcgcgcca gcctcnaacc ccggaaagtg tgtncggggg 360
gtaagcgga gaaagacgaa atcngtgtgg acagtctgga cttcaacaan aagatcctgc 420
acacagcctg ggcaccccgt ggacaatgtc attgccgtgg ctgccaccan taacttgtac 480
atattccagg acaaaatcng ctananac 508
```

<210> 3075

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3075

```
agcggggctg aagccctggg cccggcagag gaaggtcgag atggaccatg ttgggcccct 60
tctctccccg cccccaggcc gcagttcggg ggccacgccc cggcgtgctc gggtcaccgc 120
gggaagccct tgaaccccct ggcgcccggc acccacgtgc ggtaaccgcg gctcctcgag 180
agctccaggg gatgcggatc tacagtaagg gctgtggcca gatgaatgaa tgcacatttt 240
ttagtgggca gaaagatgtt agaattcatg aattagaata agcacaaagg anggtgagag 300
gggangccgt ggaanccgca ttcctcccc tgaactgggc gccaccccc gaaggggcg 360
gtccccctcc tgctccactg cacgtgggtg tttaccagg ggatatccag tgcctcaagc 420
```

accacgaccc ggganaaaac tgggttgana aagtcttcta acaanccttt tgcacacctg 480
ccatgt 486

<210> 3076

<211> 598

<212> DNA

<213> Homo sapiens

<400> 3076

aggctcgcg ccccttccgg cgcggggagg gcgctgaaga tcggggccgc tcggccgcag 60
gccgcctcca gcgccgcggg atgtagcgcg ggggaccgcg gccccagca gagccgcct 120
gcccagcttg tctacatca gagggagatc tctgccccct ggggctgaga gacccaacc 180
tttcccaag ctgaagctgc agggatttga ggtaccagcc agatgtcttc ccacaaagga 240
tctgtggttg cacaggggaa tggggctcct gccagtaaca gggaagctga cacggtggaa 300
ctggctgaac tgggaccct gctagaagag aagggaacac gggtaatcgc caaccaccc 360
aaagctgaag aagagcaaac atgccagtg cccaggaag aagaggagga ggtgcgggta 420
ctgacacttc ccctgcaagc ccaccacgcc atggagaaga tggaagagtt tgtgtacaag 480
gtctgggagg gacnttggag ggtcatccca tatgatgtgc tccctgactg gctaaaggac 540
aacgactatc tgctacattg tcatanaccn cccattccct cctttcgggc ttcttcna 598

<210> 3077

<211> 719

<212> DNA

<213> Homo sapiens

<400> 3077

gggggctgta gggaggggga ccantggcag anggacctta ggtgacatt anaaataaag 60
gctagtttct gttcgacctt ggagtagggc gaagangtgt agacaggtct ggagaagcga 120
ggtaaaaccc tgagtaaaag caagaagttg gagaatatga gatacatctc atctctagta 180

aataacttaaa tgacttcccc tcttccccga gtcaancaca attcggggat gcagtgcagg 240
 acgtangtga agacactgcg agaacttaca gacaaaactg gtttgtggcc tgtttgattc 300
 ctgtcagagg tttgctgacc caagacagta tcgaaaatgc atattaagtc nattattcta 360
 nanggattca agtcctatgc tcagaagacc gaagtcnatg gttttgaccc cctcttcaat 420
 gctatcactg gcttaaattg tngtgggaaa tccaacatat tggactccat ctgctttttg 480
 ctgggcatct ccaacctgtc tcaggttcgg gcttctaatt tacaanattt antttacaaa 540
 aatgggcagg ctggtattac caaancctct gtgtcaatca cttttgataa ttctgacaaa 600
 aancaaaantc cttaagatt tgaagttcat gatnaaatcc antaaccaag gcaggttggt 660
 attggtggta aaaataaatt tttaatccat tggaatccat gccnccnacc ccnaatttc 719

<210> 3078

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3078

aggtctggac ctgaaccgag acaaggagg accacactat tcaactgctgc gtcgcanagc 60
 gggctgggcg gctgtctgga cctcgagagg cctgaggcaa ggatcgctgc agaccccgaa 120
 agctggtttg ttgattagtg atctaagacc gccggaagcg cttcttctca atcaagctat 180
 gcaacaggaa gtcattacga tcccgttgta acctctaaat atgtccccgt tctgcacagc 240
 atcccgataa ccgttttggt tttctcatat tatgaccttc tcatgttagc accacttcgc 300
 aacgctccag gtcgtgaagg agcaacttca ccatcgccgc ctacagacgc cactgggagc 360
 ttgggagagt gggacgtgga caggaacgta aagaccgaag ggtgggtttc gaaagagcgg 420
 atttcgaaat tgcaccggtt gaggatggct gacattctct ctcagtcaga gaccctggcg 480
 tcncaagacc tcagtgggga cttcaagaaa ccagctctgc cgggtgtcca ncggggcgga 540
 gtnnggnccg gccca 554

<210> 3079

<211> 550

<212> DNA

<213> Homo sapiens

<400> 3079

```
gtcctccggg gattagagcc ggtgggctcg ttgtgggcgc catttctcgg cgtctcccga 60
nggagccgcc ctttctcag ccttgctcgg ctcttccccg ctctggtcgc cggggctcgc 120
ccgtccccag ctcaagtaca aaaatgctga gtttcttccg taaaacacta gggcgctcgg 180
ctatgcgtaa acatgcagag aaggaacgac tccgagaagc acaacgcgcc gccacacata 240
ttcctgcagc tggagattct aagtccatca tcacgtgtcg ggtgtccctt ctggatggta 300
ctgatgttag tgtggacttg ccaaaaaaag ccaaaggaca agagtgttt gatcagatta 360
tgtaccacct ggacctgatt gaaagcgact attttggctt gagatttatg gattcagcac 420
aagtingcaca ttggttgat ggtacaaaaa gcatcaaaaa gcaagtnaaa attggttcac 480
cctattgtct gcatcttcna nttaagtttt attcctcaaa aaccaaataa ccttcgtgag 540
ganctaaccc 550
```

<210> 3080

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3080

```
tatcacagaa agaaattcgt gtctatagct tttaaggact tgattacatc attttcaagc 60
ctgatagttt tggaatcacc attagagctt aagacacacc tgccttcatt tcaaccacct 120
gtcttcatac cctgacgaag tgcacctttt aacactcctt tgccttgga ttacttaaga 180
gttcccagaa atacatttgc caccaacaga gtagccaaat ttataaggaa aaatgattcc 240
caatggatat ttgatgtttg aggatgaaaa ttttattgag tcttctgttg ccaaattaaa 300
tgccctgagg aaaagtggcc agttctgtga tgttcgactt caggtctgtg gccatgaaat 360
gttagcacac agagcagtgc tagcttgctg cagtcctat ttatttgaaa tctttaatag 420
tgatagtgat cctcatggaa tttctcacgt taaatttgat gatctcaatc cagaagctgt 480
```

tgaagtcttg ttgaattatg cctacactgc tcagttgaaa gcagataang gaattggtaa 540
aagatgttta ttctgcagca aaaaagctga agatggatcg antnaagcag gtttgtggtg 600
attatttact gtctagaatg gatgttacia gctgcatctc ttancgaaat tttgcaantt 660
gtatgggaaa cccccgttgg ttgaataaag gttgaatgct tatnttcngg ancattttgt 720
tacaattttc tgaaaaagga ggaantt 747

<210> 3081

<211> 618

<212> DNA

<213> Homo sapiens

<400> 3081

taagtcagct gcagacttga ttagcctgcc taccactgta gagggacttc agaagagtgt 60
agcttccatt ggcaataactt taaacagcgt ccatcttgct gtggaagcac tacagaaaac 120
tgtggatgaa cacaagaaaa cgatggaatt actgcagagt gatatgaatc agcacttctt 180
gaaggagact cctggaagca accagatcat tccgtcacct tcagccacat cagaacttga 240
caataaaacc cacagtgaga atttgaaaca ggatatactg taccttcaca actctttaga 300
ggaggtaaac agtgccttag tggggtacca gagacagaat gatcttaaac tcgagggaat 360
gaacgagaca gtcagtnatc ttaccagag agtcaacctg atagaaagcg atgtggttgc 420
tatgagcaag gtagaaaaga aagcaaacct gcccttcagc atgatgggtg atagatctgc 480
cactctgaaa agacagtctt tggatcaagt cccaacagaa cagatacagt naaaatccna 540
agcataaaga aagaagatag ttcaaattct caggntcca agctaanaan agaaactcca 600
gctgatcagt gctcttac 618

<210> 3082

<211> 609

<212> DNA

<213> Homo sapiens

<400> 3082

```

gctgtacggt gcgcgtgacg gctgcgtgcg gcgggaacca tggctgctcg cagagctctg   60
cacttcgtat tcaaagtggg aaaccgcttc cagacggcgc gtttctatcg ggacgtcctg  120
gggatgaagg ttctgcggca tgaggaattt gaagaaggct gcaaagctgc ctgtaatggg  180
ccttatgatg ggaaatggag taaaacaatg gtgggatttg ggcctgagga tgatcatttt  240
gtcgcagaac tgacttacaa ttatggcgtc ggagactaca agcttggcaa tgactttatg  300
ggaatcacgc tcgcttctag ccaggctgtc agcaacgcca ggaagctgga gtggccactg  360
acggaagttg cagaatgtgt ttttgaaacc gaggccccgg gaggatataa gttctatttg  420
cagaatcgca gtctgcctca gtcagatcct gtattaaaag taactctagc agtgtctgat  480
cttcaaaagt ccttgaacta ctggtgtaat ctactgggaa tgaaaattta tgaaaaagat  540
gaagaaaagc ccagggcttt gctgggctat gccnataacc angtnagca atcttggaga  600
agaataacc                                     609

```

<210> 3083

<211> 705

<212> DNA

<213> Homo sapiens

<400> 3083

```

caaaataatg ttataaatt tatitgtcta tactagtaga agtgatcagt gacatactat   60
aaataatcct aaatggttat atttgataga attcataaca cattaaagag aaaatttcac  120
attaaaggaa ggtttaaaaa tctattttca gattataaaa ggtgtcttta ctggttttca  180
ttccttttat ctacatgtaa ttggacatgt aaacttgtta aaaatcaaaa tcttactgat  240
tgtacaggga naaattaagc attctgtttt aaaaattagg cttattgcta gactgtaagt  300
ttaaaaacaa ttcattgtca aaggagcttt tcaaattacc cagtccacca cagaatcagc  360
taatgtgaca gaagtaaata tagtgcgtca taattgctaa aaacagggtg aatttctttc  420
acttaagttg gaaaaccanc ctctaaaaaa ttaggtgctg gtaatganan cttaatacca  480
tggttccctg caggtctcaa aaacattaat anttcctttc ttggccctca ctgtccttcc  540
agtgttgggc tctggcctct tccctcacat ttatgttcat tctccgggt tatattcatt  600

```

ctctgtgtgt ttctcccttc accgtgggan tctcaccctc ttgttcattc tccancaccc 660
attcctactt taatctcttg aaatcttttt ngganatttc cctcn 705

<210> 3084

<211> 631

<212> DNA

<213> Homo sapiens

<400> 3084

gcagcggcgg cccacacagc agcgnagagg cgagaggagg ctgcctcgag ggatgaagtg 60
caaaccacac cagacgcgga cctacgaccc cgaggggttc aagaagcggg cggcgtgcct 120
gtgcttccgg agcgaacgcg aggacgaggt cctgttagtg agtagcaacc ggtacccgga 180
ccgctggatc gtgccgggcg ggggcatgga gcccaggagg ganccgggcg gtgcggcggg 240
ccgagaggtg tncgaagaag cgggagtgca ggggaagtta ggccggctcc tgggcgtctt 300
cgaacagaac caggatcgca agcacagaac gtacgtgtat gtncgtactg tcacggagct 360
gctggaggat tgggaaaatt cggtttagcat tgggaggaan cgagagtggg tcaaagtcna 420
aaatnccatc naggttctcc agtgccacaa gcccgtgcac gccgaatata tggagaaact 480
aaagctgggc ggttcccca ccaatggaaa ctccatggcc ccacccctgc cagatagcga 540
tccctaata acagcanana tgttcagtat tgtgctgaaa naaacattga tgttaacccc 600
agtgatcant ggaattgtcn agtacaggtg a 631

<210> 3085

<211> 545

<212> DNA

<213> Homo sapiens

<400> 3085

tgttgcaagt aaagaagggg aaatccgagc gttctcgcgt tggatttcct ccacgtgtga 60
agtgggaatg gtagtgatat ctctgtctat ctctgtcaag ggcaagaagg agaaggaatt 120

tatttgaggc cctacgacgt ggtagggttca ccctcagcct ttgttcttat ttcattcttat 180
 ttgtggagaa ggtcttttcg ttcctatattt acaggtgaga aaaggggccc aatatatagt 240
 tatttgcggc cataaaatag aagccagttg cctgatactg aagattcaat gaaatcttgt 300
 gattgacttc cctctttaaa ttttgtactt tgggtaacat cggatccggt agaaacgctc 360
 gtcagaaaga gtttttaatg tgcattctac aatttccaga catagtttcc ttcttgaaaa 420
 attgggttaa tactacccta tagggatctt gtgatgcacc acgtaaacgt tgtaagttgt 480
 gaaccactat acaaacgtat ganactcttc atgttcttga ntggaactgt angttaagaa 540
 nanaa 545

<210> 3086

<211> 654

<212> DNA

<213> Homo sapiens

<400> 3086

ccccactgc ccacaccag agctttaatg gacagtccgt accaagcaga gccgaggagg 60
 aggggaagcca ggggtcccag cccgtctacc tccccatccc acccaggccc ccagctcccc 120
 gcggggggcca ccgcagggcc tgtgggctgg gtcacgtggg tctcgctggg acctggtccc 180
 tttgttgcag gcggcttgga gaaagggcag tgggacgctg gccacggcca gggtggtgtc 240
 gggagcaggc ctcaccccg c tggccgtgtc tgtgtgtgtg cacgtgtgt tgtgtctgtg 300
 cgggcgcgtg canccctggt tctgcaggga aaaggtgctg ggggtgcana tccctccctc 360
 cttgagccag ggtggcactg ttcactggcg ctgggacagt canggtgacc ccaccgccta 420
 cctctctaca actaaanacc ctctgggcct gtgttgctgt tactcctact gatctgttcc 480
 tctgtttttc tttttgattt ttgtttttta aacaaaaca gacaatanct tattttcttt 540
 ccgccccctc cggggctgaa ccagggtctg aaaactgaat gtaacagggg ccgctggcac 600
 tctgcnctgt ccccggtctt ggcncctgcan gggtttcggc cccacctct ccaa 654

<210> 3087

<211> 562

<212> DNA

<213> Homo sapiens

<400> 3087

```

gtcgaatggt ttgttggcag ggtgtcctgg tggattgggt tctgtaagtt cagattctca 60
taaatcgtgt gagcgtcgcc gacacctctg agataaaagg gcccctttcg actagcctct 120
gctgaaagga cctaaaanaa tcccttagga tgaagctgag tcttaccaag gtagttaatg 180
gctgtcgcct angaaaaata aaaaacctgg gcaaaacagg ggaccacacc atggatattc 240
caggctgcct tctgtatacc aagactggct ccgccccaca cctcacccat cacacgctgc 300
ataatatcca cggggttcct gccatggctc agcttacgct gtcatcccta gcagaacatc 360
atgaagtctt gacagaatat aaagaaggag ttggaaagtt tataggcatg ccagaatcac 420
tcttgtactg ctccctgcac gatccantca gccctgccc ggctggttat gtaacaaaca 480
antctgtgtc tgtgtggant gttgcangac gantggaaat gactgtttcc aagttcatgg 540
caattcanaa ggccttcagc ca 562

```

<210> 3088

<211> 587

<212> DNA

<213> Homo sapiens

<400> 3088

```

gtccaaagg aggaaatgac cattcaggga tcttactcca gcttgattac ggagactgaa 60
ccttcatagg gtgcgcactt accaaggaca ggaaggtttc tctgtttgaa gggctttaa 120
cttataacaa agaaaataaa aatgacgact tcgtctatca gacggcagat gaaaaacatc 180
gtgaacaatt actcagaggc agaaatcaaa gtccgggaag ccacctcaa tgacctgtg 240
ggcccggtcca gttctctgat gaccgagatt gccgacctga cctacaacgt ggtggccttc 300
tcggagatca tgagcatggt gtggaagcgg ctgaatgacc atggcaagaa ctggcggcat 360
gtgttcaagg cgctgaccct gctggactac ctcatcaaga caggctccga acgtgtggcc 420
cagcagtgcc gggagaacat cttcgccatc cagaccctga aggacttcca gtacattgac 480

```

cgagatggca aggagcaggg catcaatgtg cgtgagaagt caaagcaact ggtggctctc 540
ctcaaggaca aagaacgttn aangctgaaa aggcccangc tctcaaa 587

<210> 3089

<211> 570

<212> DNA

<213> Homo sapiens

<400> 3089

gtgctaggag atgatcgggg gaaagcatag tcccctgtct gtggcaccag acactcccga 60
ctgtgcgctg actctccccg cccagccagc agccttttcc agagaggctg tggatccatag 120
cctctgttcg ttttactgc aggaccaggc acgaaagtta aaacaaaatg aagatttttt 180
ctgaatctca taaaacagtg tttgttgtgg atcactgccc ttatatggca gaatcttgca 240
ggcagcatgt cgagtttgat atgctggtga agaatanac ccaaggaatc attcctttgg 300
cccccatatc taaatcattg tggacttgct cagtanaatc ttccatggaa tattgtanaa 360
taatgtatga tatatttctt ttcaaaaagc tggatgaattt tattgtgagt gactctggag 420
cacatgtttt aaattcttgg actcnagaan accaaaattt acaggagcta atggcagcat 480
tanccgctgt tgggcctcct aatcctcggg cagatccaaa ntgctgcatn ttctgcatgg 540
ccttgttgcn ccantggaaa ctctctgcc 570

<210> 3090

<211> 499

<212> DNA

<213> Homo sapiens

<400> 3090

actacctgc tgggacctgg tcttgctgtc ccccgctggc ctcctgcca agcgactgcg 60
gccaggatgg gccggaaggt gaccgtggcc acctgcgcac tcaaccagtg ggccctggac 120
ttcgagggca atttgcaaag aatttttaaag agtattgaaa ttgccaaaaa cagaggagca 180

agatacaggc ttggaccaga gctggaaata tgcggctacg gatgttggga tcattattac 240
gantcggaca ccctcttgca ctcgtttcaa gtcctagcgg cccttctgga gtctcccgtc 300
actcaggaca tcatctgca cgtggggatg cctgtaatgc accgaaacgt ccgctacaac 360
tgcagagtga tattcctcaa caggaagatc ctgctcatca nacccaagat ggccttggcc 420
aatgaangca actaccgca gctgcgctgg ttcaccccggt ggtnaagaa tccgcacaca 480
nangaatact ttctgcctc 499

<210> 3091

<211> 598

<212> DNA

<213> Homo sapiens

<400> 3091

aaaccatggc caattctgcc ctatcccat tctctacccc ttccatatt tttcttctcc 60
catattattt tgaagcaaat cccaggcatc acataagatc aaaattttta catgttttta 120
cctctacttc aggttattgt tgaaatgacc tgaaatttta aggaagtagc tgaaaatagc 180
attaagattg gaaagaaagg cagacagatt atgagaggcc tataatgcca gccttgtgga 240
ggagccccag agttgtttca gtagacagac aaaatctggt ctgtgcttta gcaactttgt 300
ttcatgaatg aataattaac ctagttagag agagagtttc agaaagtgt aatgaaagga 360
atggtaatgt gaaagaggcc ctgaagcagc anaattttta tcaactggatg attaattaaa 420
tgaggggatg agggangctt tgctaacctg aatttcaagc ctgaatgagg ttgatgatga 480
cattaactaa gacagcagac atggaaaagt tatgtgtgga acttanggtt cttggattcc 540
naancaattg aaagggactt tgtctancct aagccagaag gaatttatta aaatntta 598

<210> 3092

<211> 569

<212> DNA

<213> Homo sapiens

<400> 3092

```
gtgctcgctt cggcagcaca tataactaaa ttggaacgat acagagaaga ttagcatggc 60
ccctgcgcaa ggatgacacg caaatcgtg aagcggtcca tattttttcc ccaaccagga 120
tttgaacaga gacgtgaatg tctaaccttt tgattctatt ccttttattc cagcgagtcc 180
caccactgtc acccagatga gcttgtccaa cccgaccatg ctgaggactc acagcctctc 240
caatgctgat gggcagtatg atccatacac tgacagccgc ttccggaata gctccatgtc 300
cctggatgag aagagcagaa ccatgagccg ttcaggctca ttccgggatg ggtttgaaga 360
agttcatgga tcctcactct ccttggtttc cagcacatcg tcagtttatt ctacaccaga 420
agaaaaatgc cagtcagaga ttcgcaagct gcggcgggaa ctggatgcct cccaggagaa 480
agtttcagct ttgaccaccc agctgacagc aaatgctcac cttgtggctg ccttngaacn 540
aatcttggtg acntgacatc aggctccaa 569
```

<210> 3093

<211> 675

<212> DNA

<213> Homo sapiens

<400> 3093

```
atatgttaca gtttatctgg tacttcattt ttcttaacta aaattacttt ttactttaag 60
cttgaataaa aatcttcatt ggtaactgta tgtaattaag tggcaacttc tctttacctc 120
agtatagtta aaaaccattc atattttaag tgattcatgt ataccctgaa gccgttaata 180
caccacagtc tctatggtaa catcactaaa tgtgggcata gaaactccac agctgtttac 240
aaatttggtt acagtgtgct atgggtgcatt tgtaacactc agatttgtgc ccattcaggg 300
gcaatttggc actcanattc tactctactt cacctaacca cccctagatc tgagttttca 360
gagtgccttc gaagtacagt ttaaaaacac tttttaaaaa gtggantaaa agtgaggcac 420
attttacaag aacataactc ctattaaaac ggantaacaa ctatgcaaag gtttctatag 480
canctaagtg antttgtttt ccgggtctgt cttactggc ancttcctgt acatactggt 540
acttatttgc tgtaaacgtc tgtttcatac ntttgccatg cantgactgt gctcnaaaag 600
ttaaatccat ggtaaaaaaa cctaagattt tatggtatga aaaactgatc gcgggatttc 660
```

cgattcataa annnc

675

<210> 3094

<211> 159

<212> DNA

<213> Homo sapiens

<400> 3094

gaatggaagc ggcggcggcg gcgggagcgg cctgagctgg gcgccggggc cagggccggg 60
ggctgcccag ggcccgcgcc gctgcattgg ggcggtccgc gggccctgag aggaanggca 120
tacaggcggg ccgatatann aggggcgggg tctggcgga 159

<210> 3095

<211> 501

<212> DNA

<213> Homo sapiens

<400> 3095

aggccggaac catggcagt accaaggagc tcttacagat ggacctgtac gcgctgctag 60
gcattgagga gaaggcagcg gacaaagagg taaagaaggc gtataggcag aaggccctct 120
cctgccaccc agacaaaaat ccagataatc ccagagcagc tgaactcttc caccagcttt 180
ctcaggcctt ggaggtgctg accgatgctg cagccagggc tgcatatgac aaggtcagga 240
aagccaagaa gcaagcagca gagaggaccc agaaacttga tgagaaaagg aagaaagtga 300
agcttgacct ggaggcccgg gagcggcagg cccaggccca ggagagttag gaggaagagg 360
agagccggag caccaggaca ctagagcaag agatcgaacg cctgagagaa gaggggtcccc 420
ggcagctgga ggaacagcag aggtctcatcc gggagcagat acgccaggaa ccntnaccaa 480
aggttnaaaa aggaaaaggg c 501

<210> 3096

<211> 523

<212> DNA

<213> Homo sapiens

<400> 3096

```
gcggatggat ccaacatggc ggcgccgagc ctgagccgag agaagagacc tgggaaatta 60
agtttcttgc ggagtacggt ggggattgca gctgctgagc agggattctg gaaagcattg 120
cgtacctgag cccccagcat ggcgggccta aagcggcggg caagccaggt gtggccagaa 180
gagcatgggt agcaggaaca tgggctgtac agcctgcacc gcatgtttga catcgtgggc 240
actcatctga cacacagaga tgtgcgcgtg ctttctttcc tctttgttga tgcattgat 300
gaccacgagc gtggactcat ccgaaatgga cgtgacttct tattggcact ggagcgccag 360
ggccgctgtg atgaaagtaa ctttcgccag gtgctgcagc tgctgcgcat catcactcgc 420
cacgacctgc tgccctacgt caccctcaan anganacggg ctgtgtgccc tgatcttgta 480
nacaagtatc tggangaaac atcaattcgc tatgttacc cca 523
```

<210> 3097

<211> 463

<212> DNA

<213> Homo sapiens

<400> 3097

```
gaatcagagc gcggctgaag cggccccgc agccaacccc cganggagcg gccggctggc 60
gtccgccgcg cccaggagtt ggggatgtcc taaaaccca tcgcccctgc tcccagcagc 120
acccctggct ccagcacccc tgggccgggc accccggtcc ctacaggaag cgtcccgtcg 180
ccgtcgggct cagtgccagg agccggcgct ctttcagac cgctgtttta cgactttgga 240
ccgccttcca tgggctacgt gcaggcgatg aagccacccg gcgcccaggg ctcccagagc 300
acctacacgg acctgctgtc agtcatagan gagatgggca aagagatccg gcctacctat 360
gctggcagca agagcgccat ggagcgcctg aaganaggta tcatccatgc ccgggccta 420
ntcaganagt gcctggcaga nacaganccg aacgcccga cgt 463
```

<210> 3098

<211> 606

<212> DNA

<213> Homo sapiens

<400> 3098

```

gcgctcctgc tcttaggaag cctggggaag gaccggtgtg ctagggagat gatcggggaa 60
agcatagtcc cctgtctgtg gcaccagaca ctcccgactg tgcgctgact ctccccgccc 120
agccagcagc cttttccaga gaggctgtgg tccatagcct ctgttcgttt tcaactgcagg 180
accaggcacg aaagttaaaa caaatgaag attttttctg aatctcataa aacagtgttt 240
gttgtggatc actgccctta tatggcagaa tcttgcaggc agcatgtcgg gtttgatatg 300
ctggtgaaga atanaacca aggaatcatt cctttggccc ccatacttaa atcattgttg 360
ccttgctcag taaaatcttc catggaatat tgtagaataa tgtntgatat atttcctttc 420
aaaaagccgg tgaattttat tgtgagtgac tctggancac atgttttaaa ttcttggact 480
caagaagacc aaaatttaca ggagctaata gcancattan ccgctgttgg gcctcctaata 540
cctcgggcag atccagaatg ctgcantatt ctgcatggcc ttgttgcanc antggaaact 600
ctctgc 606

```

<210> 3099

<211> 563

<212> DNA

<213> Homo sapiens

<400> 3099

```

aagatggcag ctgcgggagc cgtctccgcg gcgcgtgggc ttcgtgggcg cgggccgcat 60
ggcggggggc atcgcgcagg gcctcatcag agcaggaaaa gtggaagctc agcacatact 120
ggccagtgca ccaacagaca ggaacctatg tcaactttcaa gctctgggtt gccggaccac 180
gcactccaac caggaggtgc tgcagagctg cctgctcgtc atctttgcca ccaagcctca 240

```

tgtgctgcc a gctgtcctgg acagaggtgg ctctgtggt caccactgaa cacatcttgg 300
 tgtccgtggc tgctggggtg tctctgagca ccctggagga gctgctgccc ccgaacacac 360
 ggggtgctgcg ggtcttgccc aacctgccct gtgtggtcca ggaagggggc atagatnatg 420
 gcctcggggc cgccacgtgg ggagcaccga gaccaacctc ctgcagcatc ttctggatgc 480
 ctgtgggcgg tgtgaggagg tgcctaaatc ctacgtcgac atccacactg gcctcaatgg 540
 cagtggtcgt ngccttcng tnt 563

<210> 3100

<211> 651

<212> DNA

<213> Homo sapiens

<400> 3100

ggacccactg ggttgccaag ctgcgcgg atgcggagcg cgggtgctgcc ggtggagctt 60
 caggtcttga tanactttct gtaaagaagg aatgatttgg tgatggagtg ttccactga 120
 ccgatggact caaagaagag aagctcaaca gaggcagaag gatccaagga aagaggcctg 180
 gtccatatct ggcaggcagg atcctttccc ataacaccag agagattgcc aggctgggga 240
 ggaaagactg ttttgcaggc anccctcgga gtgaaacatg gagttcttct gactgaagat 300
 ggtgaggtct acagctttgg gactcttctc tggagaagtg gaccagtgga gatttgtcca 360
 agtagcccca ttctagaaaa tgccctgggtt gggcaatatg ttattactgt ggcaacagga 420
 agcttccata gtggagcagt gacagacaat ggtgtcgcgt acatgtgggg agagaattct 480
 gctggccagt gtgcngtanc caaccancag tatgtgccgg aaccaaatcc tgtcagcatt 540
 gctgattctg aagccagccc tttgttagca ntcaggattt tacagttggc gtgtggccaa 600
 gaacacactc tggcnttgtc cntaagcana naaatttggg catgggggta c 651

<210> 3101

<211> 547

<212> DNA

<213> Homo sapiens

<400> 3101

atcggctgtg gggagtaccg gctgcagtcg gctgtgccgg gagggtagga tggcgtctgg 60
ccgatgcggc gatagcaccg aaagcagacg gccgccaggc gctcccccta cccccgaag 120
tttctcccca gcggcggggg atgggggtag gcggttcctc tgttctttct gcgttccccg 180
cggcctctta ccacagagac gcgggcctcc accgtcctag ccctcccgcc ctgttctcta 240
gtgcggacta gagcgtctcc tcgccatttc ctgtcgccct ggggccccgc ggggaaaaag 300
ggggagtatc aggacagcgg aggggaagtcg cgagcttagg tgggtgtgtag acgccggaag 360
tgttgggaac gaggccggaa gctaggggcg gggccaggaa gtgaggaggg gcggggggtt 420
atgacgantc caaggagca ttggggcaga cttgcactca gagccacctg acggacttgg 480
cgggtggcgcc cagcactgtc ccctcccctc gtagagacac ggttgtcgtn tgggantang 540
gaacact 547

<210> 3102

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3102

tggcagatcc tgacatgcct gagctgcacc ttcctgccga gtcgagggat tctcaagtat 60
ctcaagttcc atctgaaaag gatacgggaa cagtttccag gaaccgagat ggaaaaatac 120
gctctcttca cttacgaatc tcttaagaaa accaaatgcc gagagtttgt gccttcccga 180
gatgaaatag aagctctgat ccacaggcag gaaatgacat ccacggtcta ttgccatggc 240
ggcggctcct gcaagatcac catcaactcc cacaccaccg ctggggagggt ggtggaaaaa 300
ctgatccgag gcctggccat ggaggacagc aggaacatgt ttgctttgtt tgaatacaac 360
ggccacgtcg acnaagccat tgaaagtcga accgtcgtn ctgatgtctt agccaagttt 420
gaaaagctgg ctgccacatc cgaggttggg gacctgccat ggaaattcta cttcaaactt 480
tactgcttcc tggacacaga caacgtgcca aaagacagtg tggantttgc ntttatgttt 540
gaacaggccc ncaagcgggt tttccatggc ccccatcng ccccggaag aaaacctc 599

<210> 3103

<211> 612

<212> DNA

<213> Homo sapiens

<400> 3103

```
tatgtcaaga aacttgtggc ttccttaggt aaggattact taaattggat cggagttgtt 60
ttctgtttta ggtagctgac ttagaaacct actaactaat aagtctttaa aatagagaaa 120
aattaacact aaacaactaa tccaagtttt ttcttaaadc caattctgat gtataaattt 180
tgaataatat taggttctta actggaaatt accatttcag ggtttgaaaa ggactaggtg 240
cgtataaaaa gttcagcccc tcatctgtta gactgattat tggtaagact ctttcactta 300
gtcagcaagc tgtgcaaagc aaatactggg atgcattcctc agcaattgag atttgaaatt 360
gtaagcaaaa gctattcttt tgcattcctg tgtccaaatg tcatcctaaa gaacttgctg 420
acttatgccg gtttgggttt tagagtaagt taactgcttg ttatatggca ggtgattggc 480
tgatgctgca tttctcctcc ccaggcagca attccccag gcaagcaacc gtcttacta 540
ncttctccaa atcctcccat ggcaaaaggc tcngaacaag gcttccagtc acctccanca 600
antattantt ca 612
```

<210> 3104

<211> 471

<212> DNA

<213> Homo sapiens

<400> 3104

```
ggaggcagcc tttgtctggc gggaacacgc attggttagcg ggagctgtcg gtaggacctg 60
gggacaccgc ggaagtcggg aaatggcctc agtggcttta gaggatgtgg ctgtgaactt 120
caccganaa gagtgggctt tgctgggtcc ttgtcanaan aatctctaca aagatgtgat 180
gcaggaaacc atcaggaacc tggatttgtt aggaatgaaa tggaaagacc agaacattga 240
```

agatcaatat agatatccca ggaaaaatct aagatgtcgt atgttagaga gatttgttga 300
aagtaaagat ggaactcaat gtggagaaac atctanccag attcaagata gtattgtgac 360
caagaacact cttcctggag taggtccttg tgaaagcant atganaggag aaatcgatcat 420
gggtcattca tcccttaatt gttgcatcan agttgggtgct gggcncaanc c 471

<210> 3105

<211> 468

<212> DNA

<213> Homo sapiens

<400> 3105

gtgctggccg cggtaaaagt ggtagcagcg gangcgancg gagggtttcc cgcggcgggga 60
ntctcactct gctgcctagg ctgagtgcag tgggtgtgatc gangcgcact gcagccttga 120
cctcctgagc tcaagcgatc ctcacctcgg cctaccgagt agctgggact acaggcacgc 180
gccactacac tcggatttct gacagtcaga cttgtccaca agaactcaac tggcaaggct 240
gcttttctgt gctaaaactg gggagctagt gggcaccatg aanatcttct gcagtcgggc 300
caatccgacc acgggggtctg tggagtggct ggaggaagat gaacactatg attaccacca 360
ggagattgca aggtcntctt atgcagatat gctacatgac aaagacagaa atgttaaata 420
ctaccaangt atccgggctg ccgtgagcan ggtgaangac anaagaca 468

<210> 3106

<211> 530

<212> DNA

<213> Homo sapiens

<400> 3106

gcgggtgttc ggctacgtca ctggggcgct acggttcctg gagctgggca gtcttctcgt 60
cagagtgggg actggtaaga gcgacctccc cgccaggctcc tgtgtgttgc cggctgaaga 120
anggatgatg attattcccc accttctaag agacaaagac caacgagcca ccacagccac 180

cagtcaccaga acccgccaat gctggggaat ggaaaatgag ggagttcaac tctggccctc 240
 acaatccagt ggangagacg aaactcatct gcctctgtcc ctctgggcac acctcatgcc 300
 angtgcatct gtggacaggg gccatgctcc tgggcttcca aagttggaga aagctgccag 360
 gctcagaccc acctaagctg aagattccct tgagaacaag tncgtcctg tggtttcatg 420
 gcctttcttc catttgtggt tcttgcaag tggaatttaa atgacatctt atcnagatgg 480
 ataaaccctg gtttcccagt gctggaatat anaaaatgga tggacaagtn 530

<210> 3107

<211> 621

<212> DNA

<213> Homo sapiens

<400> 3107

aaaaaacgaa tacaaagagc catacgacct tcggacccta cagcttgggg cctgggctcc 60
 tctgaccatc ctcatagaga aaggaaagt agtccagaga agttgatgct tcctacctgt 120
 tggagcggcc cagcagtgtg agcgtgggtt ttactgcccc atccgccatg tccttcagt 180
 ccaccattct cttctccct cccagtggca gcgaggccag atgctgctgc tgcgcctgta 240
 agagtgagac taatggaggc aacacaggct cccagggtgg gaatcctcct cccagcacc 300
 ccatcacagt gactggacat ggcttggctg ttcagagctc agagcagctc ctgcatgtta 360
 tctaccagcg ggtccataag gcagtgggtt tggctgaaac tgctctgggt cttgccaggg 420
 ccaacaatga gttgttaaaa cgtctccagg aagaagtggg tgacctgagg caagggaaag 480
 tgtccatccc tgatgaaaat ggggaaagcc gggcacatag ttccccacct gaggacctgg 540
 gcctctcaag gaaatccggg gaacctttta ggctctgtct gccgtggaaa aagaatgtga 600
 cancgtgggc ancggcgtnc a 621

<210> 3108

<211> 512

<212> DNA

<213> Homo sapiens

<400> 3108

```

aagagacctc cccaatcccg gcctgccacc acctggctcg cgcgagcccc cggcccagaa 60
tgccttaacc tgcgccgatt gctgccgccg aggtgcccct cccctgtagg gacccccgacg 120
ccgccagccc ctctctcctt tcccgcaggt tagcctggca aggaagataa agacatttgc 180
aaccaagatg gtaatcacta gtgaaaatga tgaagacaga ggaggtcaag aaaaagaaag 240
taaagaggag agtgtcttgg caatgctggg gattatcggg accattctga acctgattgt 300
gatcatat ttt gtctacatat acaccacct gtgaatggcc cagagcgctc tcanaggcct 360
cagaatggcc aaagacggaa gtcctgcgtg tcggcgcac actgaccaga ccctgcgana 420
acaagcaggc ttgacccgca catnccaccc aatcaaatgc accttcnaac ttacaaaaag 480
gtcnacaaaa tanaccgatc ctgctgcagg ga 512

```

<210> 3109

<211> 662

<212> DNA

<213> Homo sapiens

<400> 3109

```

atgtanaaaa acatttaggc ataggtcagg ccttatgcag catcagagaa cacacaccag 60
agtttaactc tgtgggtaag agttgtacaa ttgtgaaatg caaggagttc actgtagggg 120
tgagactcca cagaaaagaa aagtttctg agagcagaac ttctgtcctt ccttcccagt 180
tcggtactat aagaagacat gcacacaaag atgtttgtta tgattattga agtgttaaat 240
ggaagaaaaa tgttacccaa gtcttctcca aaaagaatgg tagatatttc cttgaaatgc 300
ctaaccatt tctggatgag actcatcaat atccccctca ctccactctc tgccaactca 360
gatataattt ccattgggca cttcacagt aatgccagga ttggggcaga natcctgaaa 420
gagcttctta taagatggca aatgtgcctg gcaagagcat ttgtattttg tcaggtggag 480
gcatgtgctg anagttattc aactatctga aatgttgaat ttggangttg tgaaaatatt 540
gaattatgct attagtttaa taatatctga ngcagtaaaa tantacctga agaatgggtgc 600
ctcattctgc ccccttgcca ntgtctcct caatcctgaa ctctctgctg angttaattc 660

```

na

662

<210> 3110

<211> 528

<212> DNA

<213> Homo sapiens

<400> 3110

```

agtcctcgc cgaccagtct gggcagcgga ggagggtggt tggcagtggc tggaagcttc 60
gctatgggaa gttgttcctt tgctctctcg cgcccagtc tcttccctgg ttctcctcag 120
ccgctgtcgg aggagagcac ccggagacgc gggctgcagt cgcggcggct tctccccgcc 180
tgggcggccg cgccgctggg cangtgctga gcgcccctan agcctccctt gccgcctccc 240
tcctctgccc ggccgcagca gtgcacatgg ggtgttggag gtagatgggc tcccggcccg 300
ggaggcggcg gtggatgcng cgctggggcan aancanccgc cgattccagc tgccccgcgc 360
gccccgggcg cccctgcgan tccccggttc agccatgggg acctctccga gcagcagcac 420
cgccctcgcc tcttgcagcc gcatcgcccc cggagccaca gccacnatga tcncgggctc 480
ccttctcttg cttggattcc ttanaccac cacngctcan ccagaaca 528

```

<210> 3111

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3111

```

ctgcttccgc ccaaaaagat aattgggaaa aactcaagaa gcttgggtgga gaagagggag 60
aaggatctgg aggtctacct ccagaagctc ctggtgcct tccctggcgt gacccccaga 120
gtactggccc acttcttgca ttttcacttc tatgagataa atggcatcac cgcggcactg 180
gctgaagagc tctttgagaa aggagaacag ctcttggggg ccggcgaggt ctttgccatt 240
ggaccctgc agctgtatgc cgtcacgggg cagctgcagc agggaaagcc cacgtgcgcc 300

```

agtggggatg ccaagaccga cctcgggcac atcctggact tcacctgtcg ccttaagtnc 360
 ctttaaggttt ctggcacaga angacctttt gggaccagca acattcagga ncanctcctg 420
 ccgttcgacc tatcaatatt caagtccttg cntcaggtgg anataagtca ctgtgatgct 480
 angcac 486

<210> 3112

<211> 501

<212> DNA

<213> Homo sapiens

<400> 3112

atctgacggc gcggtacca tggcggcggc atttgaagcc tcgggagcct tagcagcagt 60
 ggcgactgct atgccggctg agcatgtggc cgtgcaggtc ccggccccag agccaacacc 120
 cgggcctgtg aggatcctgc ggaccgctca ggatctcagc agcccgcgga cccgcacggg 180
 ggatgtgctg ttggcggagc cggccgactt cgagtcactg ctgctttcgc ggccggtgct 240
 ggaggggctg cgggcggccg gcttcganag gccctcgccg gtgcagctca aggccatccc 300
 gttggggcgc tgcgggctcg atttaattgt tcaagctaaa tctggcaccg ggaaaacctg 360
 tgtgttctcc accatagctt tggactctct tgttcttgaa aacttaagta cccanatttt 420
 gatcttggct cctacaanan aaattgctgt acagatacat tctgttatta cagccattgg 480
 aataaaaatg gaangcttan a 501

<210> 3113

<211> 544

<212> DNA

<213> Homo sapiens

<400> 3113

atgatattga agagatggga gaagaagata gtgaggtcat tgaacctcct tctctacctc 60
 agcttcagac ccccttgcc agtgagctgg acctcatgcc ctacacaccc ccacagtcta 120

ccccaaagtc tgccaaaggc agtgcaaaga aggaaggctc caaacggaaa atcaacatga 180
 gtggctacat cctgttcagc agtgagatga gggctgtgat taaggcccaa caccagact 240
 actctttcgg ggagctcagc cgcctgggtg ggacagaatg gagaaatctt gagacagcca 300
 agaaagcaga atatgaaggc atgatgggtg gctatccgcc aggccttcca cctttgcagg 360
 gcccagtiga tggccttggt agcatgggca gcatgcagcc acttcaccct ggggggcctc 420
 caccacacca tcttcgcca ggtgtgcctg gcctcccggg catccacca ccgggtgtga 480
 tgaaccaagg antggcccct atggtnnnga ctccancacc angtggaaat ccatatggac 540
 aaca 544

<210> 3114

<211> 526

<212> DNA

<213> Homo sapiens

<400> 3114

atccgccggg gggagaatat ggttgcacca tcccagaagc tgctgttagc tcgccggtcc 60
 tcggcacgcc gcccgttcgc ccctgcgctg tccgcccttc ccctagcgtt acttcgggtc 120
 cctcgtcgtg ggggttcgtg cggctcccan gangcgtgaa ccgcggacca tgagcgtggg 180
 cttcatcggg gccggccagc tggcctatgc tctggcgcgg ggcttcacgg ccgcaggcat 240
 cctgtcgggt cacaagataa tagccagctc ccagaaatg aacctgcca cgggtgtccgc 300
 gctcanggta agtgganccg ggcggaatgg gaagcgggtg gaggccagg aaaaggatga 360
 cctgagatga antgagtctg gccggcccct gcgcccaant gctggtcttt ggccggcggt 420
 gacctttact ccangaacgt nacaatcttt ccaccttctc ttgggcanct caatgtggtg 480
 ggaacaccca gggaaacata actgggggtc anatccanac actgga 526

<210> 3115

<211> 776

<212> DNA

<213> Homo sapiens

<400> 3115

```

aaagaggaaa acaccataat tttgcagcag ctactccac tgcgaaccaa ggtggccaaa 60
ctactcggtt atagcacaca tgctgacttc gtccttgaaa tgaacactgc aaagagcaca 120
agccgcgtaa cagcctttct agatgattta agccagaagt taaaaccctt ggggtgaagca 180
gaacgagagt ttattttgaa tttgaagaaa aaggaatgca aagacagggg ttttgaatat 240
gatgggaaaa tcaatgcctg ggatctatat tactacatga ctcagacaga ggaactcaag 300
tattccatag accaagagtt cctcaaggaa tacttcccaa ttgaggtggt cactgaaggc 360
ttgctgaaca cctaccagga gttgttggga ctttcatttg aacaaatgac agatgctcnt 420
gttttgaaca agantgttac actttatact gtgaaggata aagctacang agaagtattg 480
ggacagttct atttggacct ctatccaagg gaangaaaat acaatcatgc ggcctgcttc 540
ggtctccagc ctggctgcct tctgcctgat ggaagccgga tgatggcagt ggctgcctcn 600
tggtgaactt ctcccagccn gtggcaggtc ctccctctcc tcctgagacc nacaaaactg 660
attttgcccn aattagcgga acaatgtnga aactgacttt gttttnaagt ccctccccaa 720
atgccttnaa aaattggggt tgtgggaact tcnggtcccc cccaaaaaat tgtccn 776

```

<210> 3116

<211> 503

<212> DNA

<213> Homo sapiens

<400> 3116

```

attcaagcct gggccctgga aagaggggtg gacagtcccc tcccttccag tccagcatgg 60
gtctggggaa nangagcagc tttgcctgga aggggcctcc taggaggggg agcggtggtt 120
tctagctcag gctttaggat cagagagcan canattcaaa tcctgacggt tttggtaaag 180
tcaattcaat ctctccaana ctccgtttac ttgatctgcg aagtggggat aatggtatca 240
cgtcgcaggg ttgtcaggcg gagctggtag gggagctgcc ccccaanaca gcatggatgc 300
cccgcgaagg gacatggagt tgctcancaa cagcctggct gcctacgcgc acatccgcgc 360
caaccccgaa agctttggcc tctacttctt gctgggcgtc tgcttcggcc tgctgctcac 420

```

cctctgcctg ctcgtcatca ncatctcgtg ggCgccccgc ccgcnGcccc ggggcccggc 480
tcancgccgg gacccccnca nca 503

<210> 3117

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3117

attgggcggc gtgatctcgc cgcggttccg cggccctgcc gccgccgccg ccagcagagc 60
gcaccggggc gatcgggcga gtggccatgg cgggcgccga ggactggccg ggccagcagc 120
tggagctgga cgaggacaag gcgtcttggt gccgctgggg cgcgcagcac gccggggccc 180
gcgagctggc tgcgctctac tcgccaggca agcgcctcca ggagtgggtgc tctgtgatcc 240
tgtgcttcag cctcatcgcc cacaacctgg tccatctcct gctgctggcc cactgggagg 300
acacaccct cgtcatactc ggtgttggtg caggggctct cattgctgac ttcttgtctg 360
gcctggtaca ctggggtgct gacacatggg gctctgtgga gctgcccatt gtggggaaan 420
gctttcntcc nacccttccc 440

<210> 3118

<211> 261

<212> DNA

<213> Homo sapiens

<400> 3118

gtcaaaatgg cggcgagggg aacctggagc agtcccggag cctgagccac tgacaggaga 60
tgagagggcg gcggcggcgg tgggaggagg atggccgggg gtgctggcgc cgggtcggac 120
ggcgggtgctg gtggcggcgg cggcggatgc caccgccgcg gtcccagcgg caacagcagc 180
ggcgggagga gcctccggga aatggatgaa aagacgctgc tggatccann gttgaaggtt 240
cataaaagcc tctgggatta n 261

<210> 3119

<211> 609

<212> DNA

<213> Homo sapiens

<400> 3119

```

gttgccgcg ggaaaagggg anaccgcggc ggccccagc gagagcggc ttccaggac 60
gtgcgatgtg ctgcgcagcg aaaagcagga ggccggcttc ctgggggtanc ggtacaggcg 120
ggcgcttact ctgtgcgctt gcttcccca ccctgcaccg gccatgcgcc cggccttggc 180
ggtgggcctg gtgttcgcan gctgctgcag taacgtgatc ttcctagagc tcctggccc 240
gaagcatcca ggatgtggga acattgtgac atttgcacaa tttttattta ttgctgtgga 300
angcttcctc tttgaagctg atttgggaag gaagccacca gctatcccaa taaggtacta 360
tgccataatg gtgaccatgt tcttcaccgt gagcgtggtg aacaactatg ccctgaatct 420
caacattgcc atgcccctgc atatgatatt tanatccggt tctctaattg ccaacatgat 480
tctaggaatt atcattttga anaaaaaata cagtatatc aaatatacct ccattgccct 540
ggttgtctgt ggggatattt atttgcactt ttatgtcnnn aaancagggtg acttcccant 600
ccancttga 609

```

<210> 3120

<211> 564

<212> DNA

<213> Homo sapiens

<400> 3120

```

aggcgctggt ggggcagaaa cgcggcgccc tgcgtcttct gggtccgagg ctggtcctca 60
ccgtttccgc tccggcgga gtaggagga gggtccttcg acccgtgctg agctggatgg 120
accgcgagac gcgcgccctc gccgacagcc acttccgagg cctgggggtc gatgtccccg 180
gcgtcggcca gggtccgggc cgggtagcct tcgtctcgga gccgggcgcc ttctcctacg 240

```

ccgactttgt gcggggcttc ttgctgcca acctgccctg cgtgttttcc agcgccttca 300
 cgcagggctg gggcagccgg cggcgctggg tgacgcccgc ggggaggccc gacttcgacc 360
 acctgctacg gacctacgga gacgtggtt taccagttgc aaactgtggg gtccaggaat 420
 acaactcgaa cccagagag cacatgactc tcagagacta catcacctac tggaaagagt 480
 acatacaggc gggctactcc tctcccagg gctgtctcta cctcaaagac tggcacttgt 540
 tgcagnact ttccngtnga aaga 564

<210> 3121

<211> 632

<212> DNA

<213> Homo sapiens

<400> 3121

ggaagatggc ggcgggagcg acaggaggcg ctgaggaggt tcgtggcggt gacgggcgcc 60
 gaggaggacc gggcccgtt ctttctcgag tcggccggct gggacttgca natcgcgcta 120
 gcgagctttt atgaggacgg aggggatgaa gacattgtga ccatttcgca ggcaaccccc 180
 agttcagtgt ccagaggcac agccccagt gataatagag tgacatcctt cagagacctc 240
 attcatgacc aagatgaaga tgaggaggaa gaggaaggcc anaggtttta tgctgggggc 300
 tcagagagaa gtggacagca gattgttggc cctcccagga agaaaagtcc caacgagctg 360
 gtggatgatc tctttaaagg tgccaaagaa catggagctg tnnctgtgga gcgagtgacc 420
 aagagccctg gagagaccag taaaccgaga gtcatgttn tattgaaact ctggaagaat 480
 ggattcagcc tggataatgg agaactcana agctaccaag acccatccaa tgcccagttt 540
 ctggagtcta tccgcagaag ggangtgcca ncanacttcc gaagctanct cacggtggac 600
 aggtgaactt ggatatggan gaccatccgg ac 632

<210> 3122

<211> 640

<212> DNA

<213> Homo sapiens

<400> 3122

```

gctgctgatt tagttgggag tcttggttaag ttgtgggggt acagaatgct aagctgcctt 60
tcccactctc cactgcttgt cctgctctca cgcttgaacc tagtctaatac tgaacgaggg 120
acattctagg gcaatcactg aagaggaaga tgggtgggcaa taggaaggag gaggaggagt 180
agccctgaaa caaagcagtg ggggagaggg gataggagga gggaaacact agacaaaatc 240
tggaaggca agaataaggg caagggacca aggtctgtca ccaggagatc agtttccaca 300
ttctcctggt tgtttatttg tccataggtc tgcctgtaga tctgctgtag ggcttgtcac 360
cattggaagc aaggtcctac ttcagtggca gatctggtgg ccttggagtg gctgaagacc 420
accaccctcc acagggtctg gcccatgcac agccatcctt ccctaccttg agtgagcttc 480
ctctgcatgt tttctatata actggcagag cctgtagttg gaaaggggac agagtgacta 540
ctggactttg tgtgaaaaca ccaaccggga caaaacttca ntcaaggctg agacgggttg 600
gggtatatna cttgtcctna cgttaacttg gaacatggtt 640

```

<210> 3123

<211> 670

<212> DNA

<213> Homo sapiens

<400> 3123

```

tagaangatg ccatgaagga aatgactgct ttgtaaagcg agggtaaact tctgaaatgc 60
tttgattaaa ataagctata ttaaagacct caaaaccact tccctcgcag ctttctctg 120
aatgtctttc acatgaaatg ggcctgagtc actctaagac tcaccttagg gtgatcaaag 180
tagcaccttt gcaaaacaaa gaggtagaga ctccctcggc tggccgtgtg gactttgcat 240
tcaatcagaa tttggaagaa aagacttcat attcactggc aagactgcag gaccagaata 300
aagccttggg agggcagctg ccacctttac aagaaaactg gtatggaaga tattctacag 360
catccagaga catgtatttt gacatccac tggaacacag agaacaagt nttattaaaa 420
ggcatccacc ccaaagactt caaaagcttg aaccattga cttgccacga gtnattactt 480
caggaagact cctgagccag cgagaaacca ggacaatgca caaagcaaag caggttctan 540

```

aaaagaaaat gcaaactcca atgtntactt ctganaacag acaatntttg catnagatgc 600
aagtgtctgga aatgatccgt aaaagacaag aaggccaaat gganttaaag aaaagtcttc 660
atgganaagc 670

<210> 3124

<211> 833

<212> DNA

<213> Homo sapiens

<400> 3124

agatttgaat gtccaagtta aggaacttga agctaagtta cttgctacag cccctgacaa 60
aaaaaagcag aaattgctag aagaaaacgt tagtgctttc aaaacagaat atgatgctgt 120
ggctgagaaa gctggtaaag tagaagctga ggtaaacgc ttacacaata ccatcgtaga 180
aatcaataat cataaactca aggcccaaca agacaaactt gataaaataa ataagcaatt 240
agatgaatgt gcttctgcta ttactaaagc ccaagtagca atcaagactg ctgacagaaa 300
ccttcaaaaag gcacaagact ctgtcttgcg tacagagaaa gaaataaaaag atactgagaa 360
agaggtggat gacctaacag cagagctgaa aagtcttgag gacaaagcag cagaggtcgt 420
aaagaataca aatgctgcag aggaatcctt accagagatc cagaaagaac atcgcaatct 480
gcttcaagaa ttaaaagtta ttcaagaaaa tgaacatgct cttcaaaaag atgcacttag 540
tattaagttg aaacttgaac aaatagatgg tcacattgct gaacataatt ctaaaataaa 600
atattggcac aaagagattt caaaaatatc actgcacctt atagaagata atcctattga 660
agagatttcg gttctaagcc cagaggatct tgaagcgtc aagaatccaa gattctataa 720
caaatcaaat tgcacttttg ggagcccggg gtcattgaaa tgaaacccaa cctccgggtgc 780
catcgnaaga gtataaaaaa ggaanggaag aanttgtant tgcaaccggg taa 833

<210> 3125

<211> 780

<212> DNA

<213> Homo sapiens

<400> 3125

```
ccatattgcc aaaggagaag cttggggagc gggaagtcta cttggcaatc ctggctggga 60
tacactccaa gtcactgggtg cctgtgtatg tgaaggtagg gcctcaggct gagggcaccc 120
ccgggagcac cggcaagcga gtgtccacct gccccttttg ctttggcccc tttgtgacaa 180
ctgaggccta tgagctgcat ttgaaggaga ggcaccacat catgcccaca gtccacacgg 240
tcctgaagtc tcccgccttc aagtgcaccc actgctgtgg ggtctacacg ggaaatatga 300
ccctggctgc catcgccgtc catttggtgc gctgcagaag tgctcccaag gacagcagct 360
cagacctgca ggcccagccg ggTTTTtattc acaacagtga actgctttta gtcagtgggtg 420
aagtgatgca tgattccagt ttttctgtta agagaaagct gcctgatggc cacttagggg 480
ccgaagacca gcggcatggg gaggagcagc ctcccatcct aaatgccgat gcagccccgg 540
gtccagaaaa ggtgacgagt gttgtgcctt ttaaaagaca aaggaatgaa agcagaacag 600
agggacctat tgtcaaggac caggctcttc anattttagc attaagattc ctaaaaaata 660
tgaaggcgct tccttatgaaa gaaaagaagc aatttcttaa ngattaattt ccatnaagaa 720
accatatacct anntaaaaaa ggnnaaatag aactgggttg tccctcaact cctttttggg 780
```

<210> 3126

<211> 803

<212> DNA

<213> Homo sapiens

<400> 3126

```
gttcaggctg gaaaaggatc ttctagccag ctgtaccgag agagtgccac gaccatggaa 60
aaactggctg ttctcaaagc ttgggcagag gtatatgtgg tcgctatgaa tattaanaag 120
gaagcagagt caaaacaaaa aagagcaatt aaaaatactg acgatgatga tgacgactgt 180
ggtaccatcg atgaactgcc accagatagt ttaataacac tggtacaacc tgaactacca 240
acactcagtc gcctgtgggt agcagcatta aaagattatg cactcttgac ttaccagcc 300
gaattttcta gtcagcttcc tccagatggg ggagcatttt ataccctga aactattgat 360
acagctagac ttactatcg gaattcctgg gcccgaattc tccatgcggg ggcactttgg 420
```

ttaaataagca caggatttac gtgctcagag tctacagaag cagcagcaat atctggttta 480
 caaaaacgtt ctacatctgt caatttaaac caggcatcag gagcagtggg tagtgctaaa 540
 tctttgccag aaattaacaa gagacagaat gcatctgatt ttaggtgtga agtatacagt 600
 ttctttgttc ccctagacct gaggagccca ttgaacatgt tacagcatgc ctgcaggcct 660
 tacatacctt gctagactcc ccttatgttc cgaagtccat attgcagnaa gantcagccn 720
 gataaggtgg ttgggttgcc tgagtgtttt gcaccggccc ttctaattga ccctgggaat 780
 ccaatcatnc tgtccangct gtt 803

<210> 3127

<211> 799

<212> DNA

<213> Homo sapiens

<400> 3127

cagtttagctt caaacaaaaa cgaaagttag accaaggga cgtattagat atggaagtaa 60
 agaaaaagaa acatgataaa caagaacaga aaggaagtgt gggagctaca ttcaaattag 120
 gtgactcttt gtcaaacca aacgaaagag ccattgttaa agaaaagatg gtatcaaata 180
 ctaagtctgt agacacgaaa gcgagttcat ctaaatttag tagaattcta actcctaagg 240
 agtatttaca aaggcagaag cataaagaag ctccgagtaa taaagcatcg aagaaaatct 300
 gtgtgaaaaa cgtgccatgt gattctgaac atatgagacc aagtaaactt gccgtgcagg 360
 ttgaaagttg tgggaaatca aatgagaaac acagcagcgg cgtgcagacc tctaaagaat 420
 cattaaatgg ctgacaagc catggtaaaa acctcaaaat ccaccattct caggagtcta 480
 aaacatacaa cattctaagg aatgttaaag aaaaagttgg tgggaagcag cctgataaaa 540
 tatggattga taagactaaa ttagacaaat taaccaatat aagcaacgaa gctcaattca 600
 gccaaatgcc tccccaagta aaggatcaaa agaaattata tctgaataga gttgggttta 660
 aatgcactga acgttgaaag catttctctc accaaattta gaaagttcac ccaggaagct 720
 tcataaagga taagagacag ggaaaattan ncattangac ctttttttac cgggtgaaaa 780
 ggtaaccnca agganaaaa 799

<210> 3128

<211> 658

<212> DNA

<213> Homo sapiens

<400> 3128

```
gtatagtatc catgaatgaa tttatggaaa tagatatttg tgcagctcaa tttatgcaga 60
gattaaatga catcataata ctggatgaaa acttgcatag aattctgatt aaatagtggg 120
tctgtttcac atgtgcagtt tgaagtattt aaataaccac tcctttcaca gtttattttc 180
ttctcaagcg tttcaagat ctagcatgtg gattttaaaa gatttgcctt cattaacaag 240
aataacattt aaaggagatt gtttcaaaat atttttgcaa attgagataa ggacagaaaag 300
attgagaaac attgtatatt ttgcaaaaac aagatgtttg tagctgtttc agagagagta 360
cgggtatatt atggtaattt tatccactag caaatcttga tttagtttga tagtgtgtgg 420
aattttattt tgaaggataa gaccatggga aaattgtggt aaagactgtt tgtacccttc 480
atgaaataat tctgaagttg ccatcagttt tactaatctt ctgtgaaatg catagatatg 540
cgcatgttca actttttatt gtggctcttat aattaaatgt aaaattgaaa attcatttgc 600
tgtttnaaag tgtgatatct ttcacaanag cttttttata gtcagtnant cangaata 658
```

<210> 3129

<211> 781

<212> DNA

<213> Homo sapiens

<400> 3129

```
gagctgtcat ggctgctcct gtacgtagtc acggtcttgt gctctaagga aaacgacagc 60
acgtgttctt tttcactagt agaagtgacg ttggtttcat gttgacaact ttgaagccat 120
ttggaagtgt ttcagtggag agcaaaatga ataacaaagc gggctccttt ttctggaacc 180
ttagacaatt cagtacatta gtttcaacaa gcagaactat gaggctatgt tgtttgggac 240
tttgcaaac aaataatagtt cattcaaact ggaacatttt aaataacttt cataacagaa 300
```

tgcaatcaac tgatatcatt agatatctct ttcaggatgc attcattttt aaatcagatg 360
 ttggctttca aacaaagggc ataagcactc taacagccct tagaattgaa agactacttt 420
 atgctaaaag actgtttttt gactcaaagc agtctcttgt ccctgttgat aaatctgatg 480
 atgaattgaa gaaagtaaac cttaatcatg aagtctccaa tgaagatggt cttaccaagg 540
 aaacaaaacc aaaccgtatc agcagtagaa aactgtctga ggaatgtaat tccctgagtg 600
 atgtgttaga tgcattttca aaagcgccca catttcttag tagcaactat ttcacaagca 660
 atgtggacaa ttgccaaaag gactgtccga tgaccagaaa gcgctttgaa aaacgactga 720
 tgtttancca ncctgcattt aatcaagctc tgtgaacaat atgatnagag nagccaanga 780
 t 781

<210> 3130

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3130

ttcttgggtg ctgtgcatgt gcttaagtga aatgagacta gggttggact atactttaag 60
 acaacagggc gtagctgggt gcggtggctc acgcctgtaa tcccaggact ttgggaggct 120
 gaggcgggccc gatcgtttta ggtagaggat tcgagaccag cctggccaac atggtgaaac 180
 cctgtctcca ctaaaaaaaaa acacacacac aagaatcagc ctggcacggt ggcgggcgcc 240
 tttaatccca gctatttggg aggctgaggc aggataatcg ctggaacctg ggaggcagag 300
 gttgcagtga gctgagattg cccactgca ctccagcctg ggcgacagag caagactgtc 360
 tcaaaaaaca aaacaaaaaa cagggtgtat ttttctggtg accatttaaa aataattttt 420
 atgggtacct agtatgtgta aattagcagc gtaacctttt tagtataatt tgagcataat 480
 agctaaatta tcgagcactt gctacatgct agcagcttga cttagatggt ttacatagat 540
 atttctcatt taattctcac aacaaacctt taantcangt gagaaaatgg agacacaggt 600
 aatttaccta aggccacant gttaaaaaat tgtaaagaa gctggggatc tgatccttgt 660
 gtgatcacca agtnaaaact gacaagcctc tgttctcccc taagaagggt ccccncttaa 720
 aatcaagnat naaccaatgn aaat 744

<210> 3131

<211> 693

<212> DNA

<213> Homo sapiens

<400> 3131

```
acttgggtctc ctgctttcgc gacatggcct tcaatTTTgg ggctccctcg ggcacctccg 60
gtaccgctgc agccaccgcg gccccgcgg gtgggtttgg aggatttggg acaacatcta 120
caactgcagg ttctgcattc agcttttctg ccccaactaa cacaggcact actggactct 180
ttggtggtac tcagaacaaa ggttttggat ttggtactgg ttttggcaca acaacgggaa 240
ctagtactgg tttaggtact ggTTTgggaa ctggactggg atttggagga tTTaatacac 300
agcagcagca gcaaactaca ttaggtggtc tcttcagtca gcctacacaa gctcctaccc 360
agtccaacca gctgataaat actgcgagtg ctctttctgc tccaacgctg ttgggagatg 420
agagagatgc tatTTTggca aaatggaatc aactgcaggc cTTTtgggga acaggaaaag 480
ggtatTTTcaa caataatatt ccgccagtgg aattcacaca agaaaatccc tTTtgccgat 540
TTaaggcant aggttatagt tgcattgcca gtaataaaga tgaagatggg ctagtggTTT 600
tagTTTTcaa caannnagaa acaggagatt cgaaagccaa caacaacaag ttggnanaat 660
caattgcata aaaggTTTTT gggaagggaa cca 693
```

<210> 3132

<211> 775

<212> DNA

<213> Homo sapiens

<400> 3132

```
tcttcaagga aagtcagatt ggtccaaact acttgagcca ccgaatttct ttcaaaagta 60
tagacattat atagtattga ctgccagcgc atcaacagaa gaaaaccatc tagagtgggt 120
tggattagta gaatctaaaa tccgtgtact tgttggaac ttggaacgga atgaatttat 180
```

tactcttgcc catgtgaatc cccagtcatt cccagggaaat aaggaacatc ataaagacaa 240
 caattacgta tcaatgtggt tccttgggat aatttttcgg agagtagaaa atgcagaaaag 300
 tgtcaacata gacttgacat atgatataca gtcatttact gatacagtgt acagacaggc 360
 aaacaatata aatatgctaa aggagggaat gaaaattgaa gcaactcatg taaagaaaaa 420
 acaacttcac cactaccttc ctgcagaaaat tcttcaaaag aagaaaaagc aaagtctctc 480
 tgatgtcaat cgaagctcgg gcggacttca atccaaaaga ttgtctctgg atagcagttg 540
 tctggatagc tccagagaca ctgataatgg aacacctttt aattctccag cgtccaagtc 600
 tgatagccct tctgtaggag aaacagaaaag gaatagtgtg gagcctgctg ctgtaattgt 660
 ggagaagcca ctgagtgtac accagnccaa ggactttcca ttccagtgat tggcgcaaaa 720
 gttgactcta cagtaaaaac tggtntcacc cccacggng ngttacaatt ccna 775

<210> 3133

<211> 805

<212> DNA

<213> Homo sapiens

<400> 3133

aaatcttttg tagttatccc acagttctta tatcttgttt ttttattctt ctctttgctt 60
 ttcaggtgtg gatgtttctg ctgatataatt ctcaagctct ttagttggct gtttcttggc 120
 caataataag cctaccaaag acattcttca tttctgttac actgtcttca atttctagca 180
 tttctttgtg gttcttagaa tttccatctc tgtgtttaca ctgcctgtct gttcttggat 240
 gctgtctgct ttatccagta gaacccatgg catatcaatc ataattgttt taaattccca 300
 gtctgataat ttcagcaatc ctgctataatc tggttctggt tcttactctt tctctttaa 360
 ctaacttttg ccttttagta tgcttgtaat ttttccttan ctggacatgg catactggat 420
 aanaggaaat gctgtaagca ggcctctagt aatcatgata agctgtgggg anaggggcan 480
 cattctattg tccagggatt aaatgtcagt cttgcagtga gtctgtgctt ctgcactgcg 540
 aacttcagtt tttcccacc ttttaattggg tcaggatgta taaaattggg tggaattgga 600
 tatttccctt ccccaggta ctgaaactct gantaaaacc caggtgtggt gggcttatgc 660
 ctgttatacc ancacttttg gaaggccaan ggcagggtgga tcacctgaag gttnggaatt 720

catgaaacaa ccctgaattg gcttgaatcc caaaaagggtg gaagggtcccc ntngaaccca 780
 aaaatttgtg aatactgccc ncccn 805

<210> 3134

<211> 624

<212> DNA

<213> Homo sapiens

<400> 3134

agccggccgc taagaagccg aaagatgtcc aggtcgggcg cggcggctga gaagcggact 60
 ccagacagcg accccagatg aaggtaaagc aatataaaga aaatcaaaac atcgcttatg 120
 tgtctctgag accagcacag actacagttt taataaaaac agctaaggct tatcttgccc 180
 ccttttccact cagtaattac cagctagacc agcttatgtg ccccaaattc ctatcagaaa 240
 agaattctaa caatgaagtg gcgtgtaaga agactaaaat aaagaaaact tgcagaagga 300
 ttatacctcc aaagatgaaa aacacatctn ccanggcaga atccacgctg caaaattcat 360
 cctcagctgt tcatactgaa agtaacaagc tacaacccaa gagaacggca gatgcgatga 420
 aatctcagtg ttgatgtgga aagtngtcag gatggagaca gtgatgaaga taccnccca 480
 gccctggatt ttctgggatt gtcaccctac gaaaggaaga gactgaagna acatttcaga 540
 aaacgcagac ttttttgctt ctcttcagtt gtctgantct gctgcaanac tccgtggaaa 600
 tgatagaana aganaccgcc tcct 624

<210> 3135

<211> 423

<212> DNA

<213> Homo sapiens

<400> 3135

atcttgctgg ttgctggccg gtcttgatg aagcggcggc cgtgggtgaga gcgtggggaa 60
 ggggtggggtg agggggcgag gccgcagcta gggcggcgaa actctcctcc cctcgccccc 120

accgcgtggg acggcgtgaa cgtggtgtcg gagggatgtc agccttctct gaggcggcgc 180
 tggagaagaa gctgtcggag ttgagcaact cgcagcagag cgtgcagacc ttgtccctgt 240
 ggctcattca ccaccgtaaa cactcgcggc ccatcgtcac cgtgtggggac cgggagctgc 300
 ggaaagccaa accaaacagg aagcttactt ttctctacct agccgatgat gtcatacga 360
 ncagcaagag gaaggggcca gagtttacia aagattttgc accagtcata gtngangctt 420
 tta 423

<210> 3136

<211> 484

<212> DNA

<213> Homo sapiens

<400> 3136

ggacggtggc ggcgagcggc gtcagagctt gaggggggggt tgacggcttc tggcgggttg 60
 cgggtgttgaa ggcgagagct tgcttggccc gtgtcgcttc tgtcccaaga accggacgga 120
 gagttagggc acgagggtcg ctgtcggggg ctgtcgtctt ccacgtacac gtcgtcgtga 180
 ggagcgcagt ccggactctt cccgcaaccc ctccggctcc ctttccgcac gcctcgaggc 240
 ggcggcggcc accgagacag cagcgcacct tccccatcc cttcccccta tccccagcc 300
 caaaagggcc cggctctgcg cccacccccg cccgtccgcc cgctacgccg ccgccatgtc 360
 ggcgagggcc cagatgcgcg cgatgctgga ccagttgatg ggcacctccc gggacggaga 420
 tacaactctc aacaaatcaa attcagntga tgacagagta tgcaagantc accttcncaa 480
 ctgt 484

<210> 3137

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3137

acaaaagagt gctaactact ctaggagaga ttaaagcctg tgaaatagaa cttttccaga 60
 taatggcgag tttttaggct tgctcatgct gaagcttaat ataagctaat aagtagagaa 120
 attaggaggc ttggatattg caaactttat tggttggggt gttacccagg ctaatagaaa 180
 aaaaattata tcctagaaag acagaacagg tgcgacttct gagaagaaag gttagagaag 240
 actagaaagg ctgggaccac cttgaatttg gcacacacac acacacaccc acacgcacac 300
 acaaaatcac caaatgatct ggaatgtgct atgcgatgag tcagcctcca ctgctgtacg 360
 tccttggcta cagactcctg gaacagcagc tcttctcaag gctagtgtg acagactcct 420
 ggaacagcag ctcttctcaa ggctagtgtg gacatccaaa gtgacaagag caggcccata 480
 ttcagccacc tcatccaggc cttatcaaag aagagtctta tatgagatca aatggctgcc 540
 tttccccaca agattatatt tttcctggta tgctctactt tgacacatgt ggctttctca 600
 ggaattttca ataaaccgtg acttcactan ggtggcctaa gccccgatgt aaaatgtata 660
 tcccactgga ccctgattta caatgcagac tgccccaatg tngacagcac ctgtttgtgc 720
 ctcaaaatgg gnacactttc canaaatgag tggtttncct ttgngttga aaca 774

<210> 3138

<211> 890

<212> DNA

<213> Homo sapiens

<400> 3138

gcgcgtcttc gccggcccgc cccgaaccgc cccgcgctgg gaatttgcgg cggcctccgc 60
 cggggcagcc gagctgaacc ggtctcttcc tcggaaaggc agggccgagg ggcctgcggg 120
 gcagccatgg aggcgacgcg gaggcggcag cacctgggag cgacgggcgg cccaggcgcg 180
 cagctgggcg cctccttcct gcaggccagg catggctctg tgagcgctga tgaggctgcc 240
 cgcacggctc ccttccacct cgacctctgg ttctacttca cactgcagaa ctgggttctg 300
 gactttgggc gtccattgc catgctggta ttccctctcg agtggtttcc actcaacaag 360
 cccagtgttg gggactactt ccacatggcc tacaacgtca tcacgccctt tctcttgctc 420
 aagctcatcg agcgggtccc ccgcaccctg ccacgctcca tcacgtacgt gagcatcatc 480
 atcttcatca tgggtgccag catccacctg gtgggtgact ctgtcaacca ccgcctgctc 540

ttcagtggct accaagcacc acctgtctgt ccgtgagaac cccatcatca agaattctcaa 600
gcccggagacg ctgatcgact cctttgagct gctctactat tatgatgagt acctgggtca 660
ctggcatgtg gtacaatccc ccttcttcct catcctcttt catgtacttc aaccggntgc 720
tttactgcct ccnaaagctg agagcttgat tccagggcct gccctgctcc tgggtgggaa 780
ccaatgggcc tgtacnaact gggtacctgg tcaaccgang ggccaaaatt ttnaacctcc 840
ttaaccttta accttttttc gccaatgctg ggccctnctt cctggaacna 890

<210> 3139

<211> 785

<212> DNA

<213> Homo sapiens

<400> 3139

accttccaac ccagccctcg gctgagccgc gccgcacat gcccgccgtg gacaagctcc 60
tgctagagga ggcggtgcag gacagccccc agactcgctc tttactgagc gtgtttgaag 120
aagatgctgg caccctcaca gactatacca accagctgct ccaggcaatg cagcgcgtct 180
atggagccca gaatgagatg tgcctggcca cacaacagct ttctaagcaa ctgctggcat 240
atgaaaaaca gaactttgct cttggcaaag gtgatgaaga agtaatttca acactccact 300
atttttccaa agtgggtgat gagcttaatc ttctccatac agagctggct aaacagttgg 360
cagacacaat ggttctacct atcatacaat tccgagaaaa ggatctcaca gaagtaagca 420
ctttaaagga tctatttgga ctgctagca atgagcatga cctctcaatg gcaaaataca 480
gcangctgcc taagaaaaag gagaatgaga aggtgaagac cgaagtcgga aaagaggtgg 540
ccgcggcccg gcggaagcag cacctctcct cccttcagta ctactgtgcc ctcaacgcgc 600
tgcagtacag aaagcaaagtg ggcatgatgg agcccatgat aggctttgcc catggnaag 660
attaactttt ttaagaaggg agcagagatg tttttccaaa cgtatggna gcctttttan 720
cctcccgttg canacatggg ttcaaagcat tcaaggtana aactgggaaa ccnagggcgg 780
gaaaa 785

<210> 3140

<211> 809

<212> DNA

<213> Homo sapiens

<400> 3140

```

tgagaaactg gcacttcaga tattatatcc tttagctata ggttcttctc tccctaagaa   60
cattagatat tttagttttc cagaacaaaa gctttaaact tctgcagtaa gttgagagaa  120
gggttgagaa gaggaaaaga acttctcatt ttctatcaga taagaatcac attagaaact  180
aagtacaaga ttagacaaca aattatgtgg tcaaataata tagtcattag ccacctaaac  240
attttaattc cagatattat ttaattccat ataataactg aattcttgtg agtggattac  300
aggtttttga tcccaaaatt ccagagcttt caactctctg aatttgtagt cctgaatatc  360
ccagtgggtg gggttcccag cattgtgggt gctacttgca aggccatagg atctagatgg  420
ccctgtcttg accctgaaat gaaccttaag ccttagaaca aagtcattgca gatgccccat  480
ttgataataa tcttattcac ctgtgctctg gtctcgggtt tctgcatgtg ttagcattgc  540
attgataact cagaatcttg ataaacactt aatatttggg cctgaagcat taaactttct  600
ttttattgta tatacttaaa aaatagaact cactgcccta tcatacattg gtngccctcc  660
ttattctttg gtctttcata tgcattaagt taaatcccct taaaggtaga cattcataaa  720
aaacttacat tggtaattg ggggtataaaa atattacca angtttcctt caatgagntt  780
gacaatgaag ctggttttta aatacnggg                                     809

```

<210> 3141

<211> 787

<212> DNA

<213> Homo sapiens

<400> 3141

```

atttcattgt tactattgtt gttcttaaaa atgtcctatc ttttacaaga gcctttggga   60
aaaacctcca ggggcaaacc tctgatgtct tctttgcggc cggtagcttg actgcagtac  120
tgcattcact caacgaagtg atggaaaata ttgaagtta tcatgaattt tggtttgagg  180

```

aagccacaaa tttggcaacc aaacttgata ttcaaataaa actccctggg aaattccgca 240
 gagctcacca gggtaacttg gaatctcagc taacctctga gagttactat aaagaaaccc 300
 taagtgtccc aacagtggag cacattattc aggaacttaa agatatattc tcagaacagc 360
 acctcaaagc tcttaaattgc ttatctcttg taccatcagt catgggacaa ctcaaattca 420
 atacgtcgga ggaacacccat gctgacatgt atagaagtga cttacccaat cctgacacgc 480
 tgtcagctga gcttcattgt tggagaatca aatggaaaca cagggggaaa gatataagagc 540
 ttccgtccac catctatgaa gccctccacc tgcctgacat caagtttttt cctaattgtgt 600
 atgcattgct gaaggctcctg tgtattcctc ctgtgatgaa ggttgagaat gagcggatg 660
 aaaatggncg aaaggcgtcc taaagcatat tgaangaaca ctttgacagg accaaagggt 720
 caagtaactt ggctttgctt aacataaant tttngtatt aaaacacgaa cctnggattt 780
 taanggg 787

<210> 3142

<211> 281

<212> DNA

<213> Homo sapiens

<400> 3142

agtccatagc tgcctttgag gtggtgtaga ccttgctaac caggacggcc cagtaggcag 60
 agctcatttt tattcctgtc tgcaatcgtg caaaaacgcc tcttatggaa aagccagagc 120
 gccaggagtc agcaaaacac actaaagatt gggcagtcac tggggagaa actcagcccg 180
 ccagcaccca ggtgaaatat acagccttgt tgctcacaca aagcctgttt ggtggtttct 240
 tcacacggan gcatgtgaca tttggtgctg aatcacncag n 281

<210> 3143

<211> 784

<212> DNA

<213> Homo sapiens

<400> 3143

```

atggcgccgg aggagaactc ggggagcgaa ctcttgctgc agagtttcaa gcgccgcttc 60
ctggcgggcg gcgccctgcg ctccttcccc tggcagagct tagaagcaaa gttaagagac 120
tcatcagatt ctgagctgct gcgggatatt ttgcagaagc acgaggctgt ccacacagag 180
cctttggatg agctgtacga ggtgctggcg gagaccctga tggccaagga gtccaccag 240
ggccaccgga gctatttgct gacgtgctgt attgccaga agccatcgtg tcgctggctg 300
gggtcctgcg gaggctggct gcctgccggg agcaccagcg ggctcctcaa ttctacatgg 360
cccttaccgt ctgcaacca gagatgtgcc agctgttcac caccgagcta tgctggactg 420
ggatcagatg ggaagcggaa gtcacatg accagaaact gtttcctac agagagcact 480
tggagatggc aaanctgaac ctcacactgt aggactcaca catgactcca acgggattgt 540
gagaattaag tcactctcgt gggaagaatt tttatatggg aangcggnta aaattttcaa 600
ttggactgga atgttttgga gaatgttaan ttccaaaatc aggaaccaca aactgcgctc 660
taataaagaa catcgggtat ctaagcatgt ggggtttccc cttttctgcc aannagttct 720
gggttcttaa agnaaaatca ccataaatca agancattga aaaattctgg gntccaaaaa 780
atag 784

```

<210> 3144

<211> 853

<212> DNA

<213> Homo sapiens

<400> 3144

```

ccttcctggt ctcccttctc ccgctgggcc ggtttatcgg gaggagattg tcttccaggg 60
ctagcaattg gacttttgat gatgtttgac ccagcggcag gaatagcagg caacgtgatt 120
tcaaagctgg gctcagcctc tgtttcttct ctcgtgtaat cgcaaaaccc attttggagc 180
aggaattcca atcatgtctg tgatggtggt gagaaagaag gtgacacgga aatgggagaa 240
actcccaggc aggaacacct tttgctgtga tggccgcgtc atgatggccc ggcaaagggg 300
cattttctac ctgacccttt tctcctcct ggggacatgt acactcctct tcgcctttga 360
gtgccgctac ctggctgttc agctgtctcc tgccatcctt gtatttgctg ccatgctctt 420

```

ccttttctcc atggctacac tgttgaggac cagcttcagt gaccctggag tgattcctcg 480
 ggcgctacca agatgaagca gctttcatag aaatggagat agaagctacc aatgggtgcgg 540
 tgccccaggg ccagcgacca ccgcctcgta tcaagaattt ccaagataaa caaccagatt 600
 gtgaaactga aatactgtta cacatgcaag atcttcgggc ctccccgggc ctcccattgc 660
 agcatctgtg acaactgtgt ggancgcttc gaccatcact ggccctgggt ggggaattgt 720
 ggttggaaag anggaactac cggctacttc taactcctca accttttctc tctccctcct 780
 canaatccta ngtcttcggc cttcaaanat ccgtccaaag gtgggcccct caaaaatcct 840
 ttngaaaaat tng 853

<210> 3145

<211> 871

<212> DNA

<213> Homo sapiens

<400> 3145

acaacttggc aagcctgtcc gagctctaaa tatcaacagg atgaataatg tcacgacttt 60
 acatcttttg caatcggtcg gaaggggtct gtgtacatca gcaactttca aaccattttt 120
 atttggagaa aatgtactct ctggatgcct gttagaagtc gggattaatg aaaattgtac 180
 tcagctcagg gagaatgctg ttgaaagact tgattcatta atacaagcga ctcacgttgc 240
 aatgagaggc aactccgatt acgctgatct tagtgatggc tggctcgaaa taatacgtgt 300
 agatgccccct gatccagggtg cagacccgct ggctagcagt gtgaacggca tgtgcctgga 360
 tattcctgct cacctgagca tccgcatact catctcggat gctggcgcggtggaaggat 420
 tactcagcag gagatactcg gtgtagagac aaggttctcc tcagtgaact ggcagtacca 480
 gtgtgggctt acctgtgagc acaaggccga ctttctccct atcagtgcac ccgtccagtt 540
 tattaataatt cctgcacagt taccacaccc cctgacaaga ttccaagatc aattatacag 600
 agtatgactg gcaacaagaa atgaggtgtg ttgggccgca gcttctatat ccatggactc 660
 agtattatca agggggagct gcattctcag tgtgttgcta angggcttac nggttgccctg 720
 ttggttcctc acattgggcc ttggttcctc aanaaacccc tgggaccang aatatgcaaa 780
 gcctaatagt tagacaacca acctgggctt ttttaatttt ttgagaatgg gagttttgcc 840

ccttgggtgg cccaangccn gaaatngntt n

871

<210> 3146

<211> 633

<212> DNA

<213> Homo sapiens

<400> 3146

```

cccggaaccc gcggtcgcca ccgcggcggc ggccccaggc tggaggcgtc cgggcgcctc   60
tttctccag cctctgggac tgcgtgctc gcagtctcct cgcctgcct gggcttgaga  120
aacctagtgc atacccaaa gagggtttt gtgtatgtgt gtgtttttaa agggtggcta  180
tgatgactgg gccttggaga tgtgagactg ggaggtaaaa tgcacacttg ctgccccca  240
gtaacttttg aacaggacct tcacagaaaa atgcatagct ggatgctgca gactctagcg  300
tttgctgtaa catctctcgt ctttctgtgt gcagaaacca tcgattatta tggggaaatc  360
tgtgacaatg catgtccttg tgaggaaaag gacggcattt taactgtgag ctgtgaaaac  420
cgggggatca tcagtctctc tgaaattaac cttcccgtt tccaatcta ccantcttg  480
ttgtccggaa accttttgaa ccgtctctat cccaatgagt ttgtcaatta cactgggggc  540
ttcaattttg catctaggta ncaatgttat ccangacatt gngnaccggg gggctttcca  600
tgggctacng gggtttgagg gagattgcat cta                               633

```

<210> 3147

<211> 651

<212> DNA

<213> Homo sapiens

<400> 3147

```

gaaacccatg tggagcccgg cgatcgttgt gacatcggga agggaagtcc aaaggaggga   60
atcctggaga ggaacaggga ggagggtgct ccaggctgaa ccgtgctcg ctctccctcc  120
aggccagact tctgggagtt cccgggcaga cggcgtttcg gtcgggacct attcctgcta  180

```

gtgcaggcct ccaggtgacc tcaactcggac ggaagaatct tcccaggct gggctgttcc 240
 ctctcctgcc cggactgtgg cctcgccggg gagagcgggc gggggagctc gcgccgagga 300
 ctggaccatc tgtacagacc agcgggagtg cgcgcgccc cctcgcacag ggccggggcc 360
 tggaccaaac cacatgaact ggactgagag ggggaagaag cggggaggaa gaaatcccgc 420
 cccaaacgtc cgctttcctt ttctctactt tgtaatttat tgatcagttt ctgttgggag 480
 acgggtgtcc tttaccgcg ggaagggggc ggggcttccc tcccgggccg catgcgggga 540
 gaggtgtctc cctccccttt ttctgcccga gtcgcggggc ccaagtcttc cttcttcgtc 600
 cgaaaggang ggangggggg actcncgtgt acaagcctcn gccccctgtg n 651

<210> 3148

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3148

acttacacat ttcttcaatg ctgaaaagt cttgtggtga acctgcttac acaaattatg 60
 ttggtggctt tcatggatgt ctagattaca ttttcattga cttaaagtct ttagaggttg 120
 aacaggatgat tccattacct agtcatgaag aagttaccac ccaccaggcc ttacctagt 180
 tttcccatcc ctctgatcac atagcacttg tatgtgattt aaaatggaaa tagatgtgtg 240
 tttaatggaa ttgaagtctg aaaaggaagt agttatttta gcagaaaatt taatatgaat 300
 caaagcttat atgtaaactt caaggaggaa tggtaaaatg ttcagccctc ctagttagtg 360
 tcctgatgtc ttcgttatga aactgttgat gtttgcatca tacatcttct ctttccttgt 420
 tttcctctac aattggagga gaaacaaata tatttcttac tagcaaaata gaaaactgaa 480
 ttatTTTTCT ccaaattgag actctcagaa aaggaagatt gaattagcgt gttttttgtt 540
 tgtttgtttt tgttttgtt tttgtttttt tgagatggag tttcactctt gttgcccang 600
 ctggagtgca atggcacaat ctcggtcac tgcaacctcc ggccccctg ggtttaagcg 660
 antctcctgc ctcaagcttc cccgagttag ctgggaatta caggcatgcg ccaacaatgt 720
 ccngggctaa antttttgga atttttaagt nan 753

<210> 3149

<211> 759

<212> DNA

<213> Homo sapiens

<400> 3149

```

aagcgcctcg cgggggtctg gcccgagtg gagggcgcg cgtcccagcc ctcccgtctg   60
gccggcgggt gtcgagttca gccctagggg acctctttct cctggacatt gaagatatgg  120
ccctttggag gtgacccang agagaaggga tgaaggcctt tggtcctcca catgagggcc  180
ccctccaagg actcgtggcc tcccgattg agacttatgg gggccggcat cgagcctctg  240
ctcagagcac tactggcaga ctctatcccc gaggataccc tgtgctggat ccagtcgcc  300
gacgcctcca gcagtatgtc ccctttgcca ggggttctgg ccaggcccga ggcctgtcac  360
ccatgagact gcgagatcca gagcccgana agaggcacgg gggccatgtg ggggctggcc  420
tgcttcactc ccccaaactc aaggaactca ccaaggccca tgagctggag gtgaggctgc  480
acactttcag catgtttggg atgccccggc tgccccctga ggaccggcgg cactgggaga  540
taggaanagg gtgggcgaca agtggcctga ccatcgaaga agtcctggag gggagctggt  600
gcctggggca caaggagat gagccaggaa gctctgccac caaacannga ggcctggtg  660
ggaagctcct gacaaccgaa cttgatttac gttgagaaaa nctcaaagnt tatgaacnga  720
tttggtagcc gccggccctg ctgaacctgc aantgaant                          759

```

<210> 3150

<211> 708

<212> DNA

<213> Homo sapiens

<400> 3150

```

atgtcgtgaa gctgggggag ctcgtcgccg ccgccggcgg ctagcgggcg tccgcgccat   60
ggagcgctac gcggccgcct tggaggaggt ggcggaagg gcccggcagc aggagcgaca  120
ctaccagttg ctgtcggcgc tacagagcct ggtgaaggag ttgccagct ctttccagca  180

```

gcgcctgtcc tacaccacgc tcagcgacct ggccctggcg cttctcgacg gcaccgtggt 240
 cgaaatcgtg caggggctac tggagatcca gcacctcacc gaaaagagcc tgtacaaccg 300
 gcgcctgcgc ctacagaacg agcaccgagt gctcaggcag gcgctgcggc agaagcacca 360
 ggaagcccag caggcctgcc ggccccacaa cctgcctgtg gttcaggcgg ctacgcagcg 420
 agaactagag gccgtggaac accggatccg tgaggagcag cgggcgatgg accagaagat 480
 catcctggag ctggaccgga aggtggctga ccagcagagc aacttgaga aggcgggggt 540
 ggctggcttc tacgtgacca ccaaccaca ggagctgatg ctgcanattg aacctgctgg 600
 nactcatccg aaagcttcaa caaaggggct gccggggcaa ggaatgcanc cctgggactg 660
 ggaagtccct gggcaantcc cctgctgccc aatnttgacc annaaagg 708

<210> 3151

<211> 844

<212> DNA

<213> Homo sapiens

<400> 3151

atacacgctt gagcaagctt tgctatcagc cagccaagag atagaaatgc atgcagataa 60
 cccagcagcc attcagacag tgggtgttaca aagggatgat ttacaaaatg gactgcttag 120
 tacgtgtcga gaactttctc gagccactgc cgaattggaa cgagcatgga gagaatatga 180
 taagttagaa tacgatgtaa ctgttaccag gaaccagatg caagagcagc tggatcacct 240
 tgggtgaagtt cagacggaat cagcaggaat tcagcgtgca cagattcaga aaaagaactt 300
 tggcgaattc aggatgtcat ggaagggctg agtaaacata agcagcaaag aggtactaca 360
 gaaatagggt cccactttcc tgttggagta gtccctccaa gagcaaaatc accaacaccc 420
 gaatcttcga caatagcttc ctatgtaacc ttgaggaaaa ctaagaagat gatggatcta 480
 agaacggaaa gaccaagaag tgcagtggaa cagctctgtt tggctgaaag tactcgacca 540
 aggatgactg tggaagagca aatgggaaga ataagaagac atcaacaagc gtgcctgagg 600
 gagaagaaaa aagggttaaa tgttatcggg gcttcagacc agtcaccctt acaaaggccc 660
 ttcaaattta agggataatc catttaggac tactcagact cnaaaggagg gatgataagg 720
 gactgggcac tgccattaga gaaaaatgan gtaaaggta ggnccatgga aactcccgga 780

acagaaaatt gttcaactaa aaggaaaacc gnacccccaa aaatggtggn ccttcagcaa 840
angg 844

<210> 3152

<211> 635

<212> DNA

<213> Homo sapiens

<400> 3152

caaatgtatc aagtaattct gaaattcttg ggggtccggcc atctaagtgt tccagtagtt 60
ctgggattat tgcagcccaa ccaccaaata ttctaaataa ctctggaata ttgggaatac 120
agccaccagc tgtgtcaa atgttctggac ttttgggagt gctaccccca aatataccta 180
acaattcttg acttgtagga gtacagccac caaatgttcc aaatactcct ggacttcttg 240
gaacacagcc accagctgga cctcaaaact taccctcttt aagtatccct aatcaaagga 300
tgcccacaat gccaatgtta gacattcgtc cgggactaat accacaggca cctgggcca 360
gattcccttt aatacagcct ggaattccac cccaacgggg aatcccaccc ccatcggtac 420
ttgattcagc tcttcatcca ccaccccggtg gaccttttcc tccaggagat atttttagtc 480
aaccagaaag acctttttaa gctcctggaa gacaaagcgt gacaatgtta ctaaccaga 540
anaaaggata ccacttgga atgataacat tcaacaggaa ggagatagag attaccggtt 600
tcctcctaaa ggaancangg gaaagcntta ntaga 635

<210> 3153

<211> 678

<212> DNA

<213> Homo sapiens

<400> 3153

atcgaggat acctacataa agtgtactga tattctgtgt atagcccagt ggatttgtac 60
atatgtatgc acttgtag ccaccacca gatgaagata ctgagcaggt ccagtacccc 120

agagctacct tcattttctat cactttccca agctgtcatc cccgccggct gtcattgggaa 180
 ccctgtctgt aagatgacgac agtttgggta aaggagtttg gtcattttaa agagtgtgaa 240
 aggagagaa cagagaaatc aaaaccttgc agggccaagg tgggtggaga ggggtgtttt 300
 cttttaacat acatgggcgg ttttaaggag aaattgaagc agcctgttca gacaattgtt 360
 ttggtatctg gccccaggtc tgtggttctt aacatgactt gtgatattat ttttaagtggg 420
 cagatggctt tttgatagct tctttatctt tcgatctcaa gctcttgcaa aggggagggtt 480
 ggtgctcatt gcaagatcag cgataagggt ttctttgtag gtcgggtggct ttcctgggtg 540
 agtacatttc aacatantat tggttttaga acctgtgtgc tgccagnna ctttgcaaca 600
 ctgttgaaga ctanccaccc tttgngacct accctccttg ggaaaatggc ggaggatctc 660
 anggtatat ccccttac 678

<210> 3154

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3154

ccctgcccc acaacatgaa agaaaagaca agagaagcac cccagaagag gaggggagag 60
 gtgccccaga aaaaatcatc cagtctctga agctttgccc aggtgggcac aggccagcca 120
 gcctctcctc tggttgcccc gctggctgca ggctgtcatt taaccttccg cccagcatgc 180
 ttttgagtgt gcagaagtgc tgcattccct cttctttgaa aacctgttga gcaaattgct 240
 ccgcatttta tgcaccttca acctccacag ccaaaggccc ccaagaccaa acatgctgtg 300
 cacacacagc agctctttgt gtccactcc tggccgatct cctgcatcat ctcgttgagc 360
 ttcatgaaac cccgcagtct gcatgctctg tggaactcag ggtcttcatt ttgcacgaaa 420
 ctcagggtct tcattttccg tggaactcaa agtcttcttg ctctgtggaa cttggagtct 480
 caaggccttt gtgctccatg gnacttgggg tctgtgtgat tcatgnact cagaatcctt 540
 gtgctctgtg gtactcaagg tgtgcgtgct ctgtggnact ccgggtctgc atgctccatg 600
 gnaagcaaca agggatgcac ttgaccccc caaaaccaat acatacatcc ttcaatttat 660
 tcctggncct caaactgtca aatctggtta gggttcttca accccaatct cntttgaggc 720

tcaaagcccg gggctcttta agac

744

<210> 3155

<211> 590

<212> DNA

<213> Homo sapiens

<400> 3155

catctcccc	aacctggggg	tctgtttctt	caacgcctgc	gaggccgcgt	cgcggttggc	60
gcgcggcgag	gatgaggcgg	agctggcgct	gagcctcctg	gcgcagctgg	gcatcacgcc	120
tctgccactc	agccgcggcc	ccgtgccagc	caaaccacc	gtgctcttcg	agaagatggg	180
cgtgggccc	ctggacatgt	atgtgctgca	cccgcctcc	gccggcgccg	agcgcacgct	240
ggcctctgtg	tgcgccctgc	tggtgtggca	ccccgccggc	cccggcgaga	aggtggtgcg	300
cgtgctgttc	cccggttgca	ccccgccgc	ctgcctcctg	gacggcctgg	tccgcctgca	360
gcacttgagg	ttcctgcgag	agcccgtggt	gacgccccag	gacctggagg	ggccggggcg	420
anccgagagc	aaagagagcg	tgggctccc	ggacagctcn	aagagagagg	gcctcctggc	480
accacacct	gacctggcca	ggagcgccct	ggggtgggcc	ccaaggagcc	aagcacnggc	540
tgangcccca	tgcaagactg	anaaagaanc	caanaccccc	cggggagttt		590

<210> 3156

<211> 750

<212> DNA

<213> Homo sapiens

<400> 3156

ccggacgcga	ggggcggggc	gaagcgcggg	acaaaggga	gcgaagccgg	agctgcgggc	60
gctttttctg	cccgcggtgt	ctcagattca	ttcttaagga	actgagaact	taatcttcca	120
aaatgtcaaa	aagaccatct	tatgccccac	ctcccacccc	agctcctgca	acacaaatgc	180
ccagcacacc	agggtttgtg	ggatacaatc	catacagtca	tctcgcctac	aacaactaca	240

ggctgggagg gaacccgggc accaacagcc gggtcacggc atcctctggt atcacgattc 300
 caaaaccccc aaagccacca gataagccgc tgatgcccta catgaggtag agcagaaagg 360
 tctgggacca agtaaaggct tccaaccctg acctaaagtt gtgggagatt ggcaagatta 420
 ttggtggcat gtggcgagat ctcaactgat aagaaaaaca ngaatatattt acgaatacga 480
 agcagaaaaag atagagtaca atgaatctat gaaggcctat cataattccc ccgcgtacct 540
 tgcttacata aatgcaaaaa gtcgtgcaaa aagctgcttt anaggaagaa agtccacaga 600
 gacaatctcg catggagaaa aggagaaccg tacatgagca ttcaacctgc tgaaagattc 660
 aagatgatta tgatgatggc ttttcaattg aagcatacaa gccaccggcc ccgttttcca 720
 ngangaaaaa ccaacggcct ccanncangt 750

<210> 3157

<211> 694

<212> DNA

<213> Homo sapiens

<400> 3157

atatgaaaaa taattgcatg atttctcatt cctgagtcatt ttctcagaga ttcctaggaa 60
 agctgcctta ttctcttttt gcagtaaagt atgttgTTTT cattgtaaag atgttgatgg 120
 tctcaataaa atgctaactt gccagtgatt aaatgagtgc ccttccaaag tttcttttta 180
 ccagaaatac agtggattga gactagaaca ttgctttcat ttgggtttgt aggtttaaaa 240
 atctgattct aatcagaagt atatttagaa caaaacactt tatttataaa agatgactcc 300
 aaaattcatc ttagtatttc accatgttat atattattat cagcaagtcc ttctgaatat 360
 tatcacagat tactccatgt ctctaaaata tattggcatt gagctcattt gttaggtttg 420
 cccaccttat tgaacagatt tattttcctt atacatactt gtgttgTcct tggttacgtg 480
 tgtcccaaaa tgtaaatacc aaatttttat aaatcaaaaa ttttttagtg tgtaagagat 540
 tttatgtaat ttttaagggc cttttcagtt catccttttg caaaaccatc accacttaat 600
 tatacttttg catcagtcta gaagactgca tattggnaaa gcaangtaaa tctannatga 660
 tggatgattct gggtgagctg gaataaggnn atta 694

<210> 3158

<211> 908

<212> DNA

<213> Homo sapiens

<400> 3158

```

atctcactcc cgccacagct tgggatcggg ctctgctggt ttacgtcctc cacctcggga 60
gcccccggtg actgtcacag cctcttgccc tgtgatctgc aggttctggg agacgcacag 120
ctaagatgcc aggacatcct ggaagctggg aaaagatgga gtttcactct tgttgcccag 180
gctggagtgc attatcccaa tctcggtta ctacaacctc cgcctcccag gttctgacaa 240
caaaggagat tgtgacatat tgctgggcct aacactaagg tgatgttagt tatatgcttt 300
ggctgtgccc ttggaaggca ttgagacata ctgctgtgcc cagcaccaag atgatgtaac 360
gtgactcttc tgcttcaggc ctgccaaaag aaaagattgt gacagatcac tggaccacag 420
acctaggtag gattgtgaca tatatctggc caagcgaca gatgtaatga tgactgtcat 480
accttgaaga agccaatagc aagagagaat gttgctctca ggcttaggaa aatgangaag 540
tctttctgta caaaagtcac aaagaattac tactctctca catatattac gccctantgt 600
gttacagaga atgtcntaac agggcccagc acacaaagtg aagattgggg tttgtcctat 660
gcacactnca ccaaaccttt tacagttgtc aaccctggac caattgacaa gagtctgcta 720
agtggaaggg tcctgaaatt acaatgtgga acacaagtcg cgcaantttg ggaatttgtg 780
acctggtcaa natggtgaaa catcctgggc taacaagttt gggaatgggg gactccattt 840
tcttaaatec aagcttcaat agggaaaggn tgaaaaantn cncctaacct gggacncaaa 900
tttgggtga 908

```

<210> 3159

<211> 187

<212> DNA

<213> Homo sapiens

<400> 3159

gtgctggtgg ctggcccgcg ggaggagcga agcggggctc ggtgggctga aaccgaaac 60
ctccagtccc ggagcgcggc ggggaggaag gaagcggcgg cggcgggtggc cgaggcggng 120
aggcggctgg gccggggcct gagctgccgc ggcggccgct cctcgggtgag caccggcnt 180
ggngcgc 187

<210> 3160

<211> 602

<212> DNA

<213> Homo sapiens

<400> 3160

atctgagcat tgataatgtt ctatctaaat ttgtacagtg tgattttttt tttagaataa 60
atattttata aaagggttta ttgtcccttg tttatgttaa aatgcttggt tccatgaggg 120
gtttcttccc tctcaatgcc cctagcccct tgggaaccag aggccccaga gacagtgtgg 180
gctcctcagc gtagcctctt ggtgacagca tgcgctgcct gggcaggcac agtgctgctg 240
tgatcacagg ggaggccatg acttggcacc tgggaagcca gctcagagca tattcagtca 300
agttgatgag gaatggcggc ccgacctcan cagcaggtcg gcgtgcggga ctctcagaat 360
ggcggcctga tctcagcagc gggtcggcat gccagactct cggagccctc agctatcttc 420
atgtgtttca ggactgctgc catgtaacgt gtgtgtgtgg agagtgtgcg gagtgtacac 480
gaagcatgcc cggaggctca gcatgaagca ctctgtaccc agctctacct cctcattgtc 540
cttcanccag tgtgtacctt cagccangcc tgnccctcnt gtggganggg cagtccccaa 600
gg 602

<210> 3161

<211> 300

<212> DNA

<213> Homo sapiens

<400> 3161

cccggctctg gagcataaac aagagcgggg acgggatgag gcggcggttg atcccagggt 60
 ggcgagtggc ggcgaccgag gcggcgagcg gggcccggcg ccgaccctga gtgcagcctg 120
 acccgccctc gcgcgcgcgc cctccccggc cgggcccact cgccgcgcgc ccagccatga 180
 acctggcgag ccagagcggg gaggccggca ccggtcagct gctcttcgcc agcttcagcc 240
 agaacaacac agaagtgaag ggggcatcga gagcagctgg acttgggcgt cncnctgtng 300

<210> 3162

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3162

agggccccgc cctgccttct ggggcaaagc ggagagtggc cggttctgcc ccacagtaac 60
 gcgaggaaag aaatctcgcg aggctggagt tctccgggag cgccggtcgg aggcggtcgg 120
 cggaggtgtc taccgcccg gtgatggcgt tgaacgccac tggcttcccg gccttcgcgc 180
 cgctgcctcc gtccgattct gcgtctgctt gctgaggagg cggattaggg gggcgcgagg 240
 tctcttcct tgagtgcata ggtcccgggt ggtagagggt ttgagtcgc atcgccacag 300
 ctgaaggctg cgagggacta agagcagaat atatcttag aaatgagttg cacaattgag 360
 aaggcacttg ccgacgctaa agctcttggt gaaagattaa gagatcatga cgatgcagca 420
 gaatctctga ttgagcaaac cacagctctc aacaagcgag tagaagccat gaaacagtat 480
 caggaagaaa ttcaagaact taatgaagtc gcgaagacat cggccacggc ccacgttagt 540
 tatgggaatc cagcaagaaa acagacaaat cagagagttg caacaagaaa acaagaatt 600
 acgtacatct ctggaagaac atcagtcggg cttggnactt ataattgagca agtaccggag 660
 aacaaatgtt tanattgcta atggctagca aaaaagatga tccgggtaaa aataatgaag 720
 tttaaagnng caagnactnc caaggattgg catggg 756

<210> 3163

<211> 155

<212> DNA

<213> Homo sapiens

<400> 3163

```
cacattttgt agttattttg atatgaaata ttgtcttgga aattgatcaa ttctctgaga 60
agtacacgtt atgatatttg tgctgggttca gggggaagaa ggagcacaaa gtcaaagggc 120
ttcctaccag tggccaatgg gnttaagnag aagna 155
```

<210> 3164

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3164

```
tatatgtgac ctttttaaaa aatgagctgt aagcagtctc ccagacagta gctcagcctc 60
cagaactctc tttctgcata gttgaagacc cctcttcaca caagatggta gcaacaaatc 120
ataggtgcaa ttgcacaaa ttcacagaag atcaattgaa aatcctcatc aataccttca 180
ctcaaaaacc ttaccaggt tatgctacca acaaaaact tgcttttagca atcaatgcag 240
aagagtccag aatccagatt tggtttcaga atcaaagagc taggcatgga ttccagaaaa 300
caccagaacc tgactttaga tttaagccac agccatggnc aagattaacc tgggtgtggag 360
tttcaaaata gagaagccag atgggtgttg accacctata gcacctttca attacacaca 420
atcatccatg catttatgaa aaaccatac cctgggattg attccggaga acaacttgct 480
gaagaaattg gtgcttcaga gtcaagagtc caaatttggg gtccaaaatc aaggntttta 540
gatttcatct ccagaggaaa aagagaacct ggtatggcct tagaatgngg naagnccaag 600
tgaagnccag ggggaagggt tctgaggagc ttcaagnnac aggaggat 648
```

<210> 3165

<211> 741

<212> DNA

<213> Homo sapiens

<400> 3165

```

ttagaagaat gcataaaacg tagtaaatgg ggtctgtcat tagcaaaggc aaatctaagc   60
aatcattttt cccccagaa gttacttaga aggagaactg ggaacacttg gggctctctt  120
aactgatggc attcacttca cacagtcgtc tatgttatcc agagattttt atttcatttt  180
acatttttagg gcacagttct ttggggctaa ttaaaatggg gtttgcaggc tttttatggg  240
gaagaataat atatctctgt ctatagcttt cccatggtag cctgataagg ctgagagaga  300
aaaatatgtg cagtatctca tcctccccct gtaccaggcc atagctttga agtgtatttt  360
gtaaattcaa ctataggtta gtcagaatgc tgtttttcgt taattaactt agcctgtggt  420
gatatctcct ccttcctggg cacattcaaa ccttcccaga gtacaaaggg gtatgtagaa  480
aggattccag aagaagtaat actttattct ctaatgttaa tagcttttcc nggatctctt  540
aagtangggg aaagtanaaa atgatgggta acagtatgtg tggngatgtc attatctcca  600
nagagggttc aagaaaatcc tttggaaata aaaagttaaa tggttgcaat tcaaggggna  660
atttcaagtc ctcaaggtct gattaactta cttttttccc tttggccttt gggctggatt  720
ccggccttgg tanataaatn a                                           741

```

<210> 3166

<211> 763

<212> DNA

<213> Homo sapiens

<400> 3166

```

tttgatttcc tagacttgct gatatttacc tctctcttgt ctcttcagag taaatgggtc   60
ccttctttcc ttctacttt ccttcattct ctcttccttc cctccttcct acttcttttc  120
ttccttcctc ttctctctt aaaactatct tagatgtaga atcctgggtg agggttttat  180
tttattttta tttttgacc caataaaatg ttatatgaaa gaatgaaaat attaatttaa  240
gagactctgg gagtctgaat aaagtagctt tatattaact acaggataat attagcctta  300
ttacccccac aagatttttt aaaacttgag gtaggtagct acattaaata aatttgctac  360
ttatataaaa atttttatca acactaaact tttaaagttt acaagttttt ttttctttt  420

```

ttacagtctt ctatagagtt aggttaaaaa tgtggntcta accatcaaca attgcatggg 480
 taaatgaccc tgaactaaaa ctggatgggt tccctancaa nacaaataaa aatatacctt 540
 tttcagggtt caatctgtgc anggtatatg caaggttaaa tccaccaagg cntaagaact 600
 tccacaaaaa tatttcaagg ganaagggcc tgcaatttag acgggaacaa gaaatgggtt 660
 tttcccctca ctggtcccgg aatgctccaa nacttggnt ttaaaatttt tgctaacctt 720
 tttttaaana aatccngatt aaggatanga ccaatttaac cct 763

<210> 3167

<211> 727

<212> DNA

<213> Homo. sapiens

<400> 3167

aaaatcgcat ttccaagccc aatgacatcg agctgtttca gatcgacgac gagacgttct 60
 ttgtcatcgc agacagctca aaggctgggtc tgtccacagt ttataaatgg aacagcaaag 120
 gattctattc ttaccagtca ctgcacgagt gggtcaggga cacggatgcg gagtttgttg 180
 atatcgatgg aaaatcgcat ctcatcctgt ccagccgctc ccagggtccc atcatcctcc 240
 agtggataaa aagctctaag aagtttgtcc cccatggtga catccccaac atggaggacg 300
 tactggctgt gaagagcttc cgaatgcaaa ataccctcta cctttccctt acccgcttca 360
 tcggggactc ccgggtcatg aggtggaaca gtaagcagtt tgtggagatc caagctcttc 420
 catcccgggg ggccatgacc ctgcaagccc tttcttttta aagataatca ctacctggcc 480
 ctggggaagt gnctatacat tctctcagat ataccagtgg gataaagaga agcagctatt 540
 caaaaagttt aaggagattt acgtgcaggc gcctcgttca atcacagctg tctccaacgg 600
 acaggagaga tttctttttt tgcatccaag tttcaaagg gaaaacaaag attttttgaa 660
 catataantt gntgacttta anttttgtga aaggtgttgg tggggtgaaa actaaggnga 720
 aatggtn 727

<210> 3168

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3168

```

ctggttctaa gtcttctcaa agaggaggag gaagatggtc aagaaggcag cattcacaat   60
ctaccacttg taacatccca aaggccattt tatgatggac ccatgccaac tccccggcaa  120
aagccatttc agtcagggtt tacaccgttg catctcactc acagattcat gcaagcttca  180
ctgcctgcac tttagtcttt gggattcaag caaagagtgg ataatagact tgcctcagaa  240
tgaggatatt gaagccatat gtctcgggtc aggatgggct gctgccgcta ctagtgcctt  300
gcttcttcga ttgtttacta ttggaggggt tcaaaaagag gtattcagcc ttgctggacc  360
tgtggtgtca atggcaggac atggagaaca gcttttcatt gtttatcaca gaggtacagg  420
at ttgatggg gatcagtgcc ttggagtcca actgctagag ctggggaaaa agaaaaaaca  480
aat tttgcat ggtgaccctc ttctctttac aaggaaatcc taccttgcatt ggattggggtt  540
ttcaagctga aggtaccctt tgttacgtgg attcagaagg aattgttcga atgcttaaca  600
gaggacttgg taatacgtgg nctcctanat gtnatacaag agagcactgc aaagggaana  660
tctgatcact actgggggtg gntggtatcc atgaaaatcc cancaactaa gg          712

```

<210> 3169

<211> 522

<212> DNA

<213> Homo sapiens

<400> 3169

```

gaaacagcac agaacacgag gtggtcccca tgtccctggc aactagcat tccgggggat   60
gaggaatccc cagcccttga ggcagagggt cagagtgact gccatgcttc gcccgctccgc  120
atgggcgctt ctgtccagct gcacccgagg ccgggggttt cctcacctc ggtcttccca  180
agatggagat gctaacgaaa ctgagaaggg ggcgtatctt gacgaagggt tgtgcaagtc  240
aggcccttct ggaacacagc agggcctaca acgaggggcc tttgcgatgg gctgtgagga  300
tgggggtggt gggaagaatt ggccacgtta gagaccccat gccacccac catggtgagt  360

```

gctctgtgcc tcctgctcac ctgtggtgag ctgggcgagc tgggcgagct gggcgagctg 420
 ggctggggag agcctgtgag gaccganagg agaaatgana anaangaaca naaatattat 480
 ttctatgtaa tttatatattt acttatgcc aattatttat ga 522

<210> 3170

<211> 641

<212> DNA

<213> Homo sapiens

<400> 3170

ttcattttac tgggagaatt aagaatgagc catatcaggt agtagaatgt gccatgcgag 60
 cacttcactt ctcttcagg cacaataaag acattgccct ggtccacctg gcaaacgttc 120
 tacacagagc acacttctct gctgatgctg ctgtcgtggt ccatgcagct ctggatgaca 180
 gtgacttctt caccagctat tacactttgg ggaatatata tgcaatgctt ggggaatata 240
 accactcagt gctctgttat gaccatgctt tgcaggccag acctgggttt gagcaagcta 300
 taaagaggaa gcatgctgtc ctatgtcagc aaaaactgga gcagaaattg gaggctcagc 360
 atagatctct ccagcgaaca ctgaatgagt taaaagagta tcaaaagcag catgaccact 420
 acctgagaca gcaggaaatc ctagaanngc ataaactgat tcaggaggag canatcttaa 480
 gaaatatcat tcatgaggac tcagatggca aaagaggcac aattaggana tcatcagata 540
 tgccgactgg gcaaccanca gcatagttaa cattgccagt gggaccagnc tgtacgccta 600
 tcatcgtggg ngatatcctt tgnaaatgtn ggctatggtc a 641

<210> 3171

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3171

gtgctaggtt ttaaatacca tccatatgct gaccaccctt aaatgtacat ctcttgcttt 60

aagatctctt cttacaccag acttatttgc tcaactgctga ctttacattt ccatttggat 120
 gttcgcaaga cgtttaaaac tcaacccggc ccaaaatgaa ctctttatta ctctcccaaa 180
 cctgctcttc ccacagtttt caccatcttg gctaacagcc aatgaccag ggctaaaact 240
 taggaacat ttttaacttc cctgtttctt tcactttcta ccatgcattt catttcttcc 300
 ttcacaatca agctaggatt tgattgcttc tcagttcctt tattgctgtc aacctgggtct 360
 cagccaccat ctgtctcatg aaatcctgaa gtaacctcct gtggctacct ttactgttga 420
 cagttaattc ttcacattgc tgccatagtt ttacttttaa tatgccagat cacatgactg 480
 cttaaaacgt acgatagctt ttcactcttc ttggggagtaa aagccaaagc cttatcatgg 540
 cttgtaaaat tctgtgtctt ctggcctgca gttaacacct ttgactctac atcctatttc 600
 tctctaatat tcctcnaaac atgccaagca ngcttctact tgggggacct ttggcagttg 660
 ctatncccc tccagtttn cgctttccnc ctaaaaaaaaa ttacataatt ttgttcccca 720
 ttctctctt tanggccan ctccaaa 747

<210> 3172

<211> 600

<212> DNA

<213> Homo sapiens

<400> 3172

gaaataacga agatccctat gggagatata tggtaacag acaagcaacc tgaggaacac 60
 aacttttagc ataccaaaat aatttcctt tctcatcttg aaatgacctg gactaacaga 120
 agaaattttc ctgcattgct tgtgaggatc ttacataaat caaaactgcg atactatgga 180
 aaacctgata aaaagatgat tgaaccatat cagacctttt tggaagttgc tgacagttca 240
 ggcacagtgt cagtgattat gtggaatgcc ctgtgtcctg agtggtataa aagtttgagg 300
 gttggtttag ttcttctgct tcaagactat tctgttaaaa agagttatcc attcagaata 360
 cagcctgtcc ccgtggatcc acagatcaaa ctaatttcta caatggaaat ctgcctgaat 420
 cttcgagatc ccccnacaaa tataattatc attccagaaa agcaggtgaa accagaatgg 480
 agactgccaa agctaaatca ccgatttacc ccnaggtcag aaactggatg atatgccnaa 540
 aaattgcac tgtgatgta tnggccttt attttgttg gaaagggtcc ancggtcaa 600

<210> 3173

<211> 686

<212> DNA

<213> Homo sapiens

<400> 3173

```

ttcggatgct tggcttggtt ttgtgtgat tctgcaagag cggttgattt tggattgagt 60
atcctgtggt tcttgctttt tactccttgt tcatttgtct gttagtacag accactttat 120
ggagctttca gtggttggtt ttcattccctt actggtctca accaaaatat tcctgttgga 180
atcatgatga taatcatagc agcacttttc acagcatcag cagtcattct actagttatg 240
ttcaaaaaag tacatggact atatcgaca acaggtgcta gttttgagaa ggcccaacag 300
gagtttgcaa caggtgtgat gtccaacaaa actgtccaga ccgcagctgc aaatgcagct 360
tcaactgcag catctagtgc agctcagaat gctttcaagg gtaaccagat ttaagaatct 420
tcaaacaata cactgttacc ttttgactgt acctttttct ccagttactg tattctacaa 480
atatttttat gttcaaaaca cacagtacag acagcatgga tatttcctgt tcacttgtgc 540
atgggctaaa accaagaaaa ctccctgtgc ttattacttt acctaatatt tcttaatat 600
tcagtgtccc ctgcanaaaa aatattacat ggccaaataa atattcccc atatttttgg 660
ggggangana ttcnntggaa ttattc 686

```

<210> 3174

<211> 548

<212> DNA

<213> Homo sapiens

<400> 3174

```

aactagccca gccgcgcgga agcgcctggg gagaggagaa ngagccgacc tgccgagatg 60
gaggcgaccg gcacctgggc gctgctgctg gcgctggcgc tgctcctgct gctgacgctg 120
gcgctgtccg ggaccagggc ccgaggccac ctgcccccg ggcccacgcc gctaccactg 180

```

ctgggaaacc tcctgcagct acggcccggg gcgctgtatt cagggtcat gcggctgant 240
 aagaagtacg gaccggtgtt caccatctac ctgggaccct ggcggcctgt ggtggtcctg 300
 gttgggcang aggctgtgcg ggaggccctg ggangtcagg ctgaagantt cagcggccgg 360
 ggaaccgtan cgatgctgga agggactttt gatggccatg gggttttctt ctccaacggg 420
 gaacggtgga agcagctgaa gaantttacc atgcttgctc tgcgggacct gggcatgggg 480
 aagcganaag cnaagaactg atccangcgg aagcccngtg tctggtggaa acattccagg 540
 ggacanaa 548

<210> 3175

<211> 671

<212> DNA

<213> Homo sapiens

<400> 3175

gctagccttg cgcggcgcgg ggagagcgca gtggcgccgg cgggaaaggg ctgcggacct 60
 gcggcgccgc gttgtgcgtt cgacgacgag gcaccggcctt cgacgccctc tgcccgtcc 120
 agaagcagta agaagacatg ttggataaca agaagaggtg tagagtttgc atatatcaac 180
 tgtggcctta atgagcatgt tgacagcatc gatgctagac agacagtctt ttactgctg 240
 gattgtgcaa gatatttaac cctattttgt ttgaattatg acttaaagt caaacatctt 300
 aactaagaaa agggaacat tttagttttg gaagtcagaa tgccaaggag aaggaaaaat 360
 cttgggggaa atccttttcg gaagactgca aaccctaagg aagttgtcgt atccagtgtt 420
 gctantcgtg aggagccaac cactactcta ccttccatgg gtgagacaaa agttgatcag 480
 gaagaactct tcaccagtat ctcagaaata tttctgac tgggacctg atgtntgtat 540
 ttgatgcttt ctgaatgtga tttcnaagtt gaaaatgcta tggattgtct attanaatta 600
 tctgcccctg atacnagat agaagaatcc cttccnaan tttcgttgct tctgaaaacc 660
 cagttngtgc c 671

<210> 3176

<211> 250

<212> DNA

<213> Homo sapiens

<400> 3176

```
aactctccgg gaggggcgct tcccgacgcc aagtcttact gttgctcagg ctggaatgca 60
gtggtgcgct ctcggctcac tgcaacctct cccttctggg ttcaagcgat tctcgtgcct 120
cagcctccca agtagctggg attacagaca aaaggatgcc acggagaaag aaaaaagtta 180
aagaagtctc cgaatctcgg aaccaggaga acaaggatgt ggaaactacc agttctgtca 240
ntgtnanaag 250
```

<210> 3177

<211> 740

<212> DNA

<213> Homo sapiens

<400> 3177

```
ggatctccag cagtggcggt acttctagcg gctggatacc gggttctccg cgagatcccg 60
agatattctc cccgcacgga agcgacgact ggcctggcca gaggactcgc gtgggagcga 120
ggtgccggcc ccgacaggac ggtgagccta cccgtatatt acaagaaatc tcaagtcaaa 180
cactggaaaa gatgtcagaa gattcagaaa aggaagacta ttcagacaga acaatcagtg 240
atgaagatga atcggatgag gatatgttca tgaaatttgt aagtgaagat cttcatcggt 300
gtgcactttt aacagctgac tcttttggtg atcccttctt cccccggact acacagatac 360
tattagaata tcagctaggg agatgggtgc cacgtcttcg tgaaccaagg gatttatatg 420
gtgtctcttc ttctggtcca ttgagcccaa cacggtggcc ataccattgt gaagtcacg 480
atgaaaaagt ccagcatatt gatggagtct catgctggag tgagtctcac caggctggag 540
cgcagtgggt cgatctcggc tcaactgcaac ctccacctcc caggttcaag cgattcgcct 600
gcttcagcct cctgagtagc agagactaca ggcgcggtgcc accacgcca gntaatttgg 660
natttttagt aaaaacgggg ttccaccatg ttggccagga tggctctccg tcttgacctc 720
gtgatccgnc tgcctcactt 740
```


<210> 3178

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3178

```

aaaaaaaaaga tgaatcactg caacttgtgg gacagccacc accctgaggt accccagcgc   60
atcttgcgga tcatgtgccg tctggaggag ctgggccttg cggg'gcgtg cctcaccttg  120
acaccgcgcc ctgccacaga ggctgagctg ctcacctgtc acagtgctga gtacgtgggt  180
catctccggg ccacagagaa aatgaaaacc cgggagctgc accgtgagag ttccaacttt  240
gactccatct atatctgccc cagtaccttc gcctgtgcac agcttgccac tggcgctgcc  300
tgccgcctgg tggaggctgt gctctcagga gaggttctga atggtgctgc tgtggtgcgt  360
nccccaggac accacgcaga gcaggatgca gcttgcggtt ttgcttttt caactctgtg  420
gctgtggctg ctcgccatgc ccagactatc agtgggcatg ccctacggat cctgattgtg  480
gattgggatg tccaccacgg taatggaact cagcacatgt ttgaggatga ccccagtgtg  540
ctatatgtgt ccctgcaccg ntatgatcat ggcaccttct tccccatggg gggtgagggt  600
gccagcagcc agatnggccg ggctgngggc acaggctt                               638

```

<210> 3179

<211> 730

<212> DNA

<213> Homo sapiens

<400> 3179

```

cacacaggca ggtcgggcag gcgggtcgca ggttgtaa at ccatgtggcg ggggctttgg   60
accctggcgg cccaagcggc acgtgggcct cgcagattgt gcacgcgccg gagcagcggc  120
gcaccagccc ccggctccgg cgccaccatc ttcgcgctaa gctctggcca aggccgctgc  180
ggcatcgcag tgatccggac cagcggcccc gccagcggcc acgccctccg aattctcacc  240

```

gcaccccgag acctgcccct tgctcgccac gccagcctgc gcctgctcag cgatccccgc 300
 tccggggagc ctctggaccg cgcactggtg ctctggttcc cagggtccca gagtttcacc 360
 ggtgaggact gcgtggagtt ccacgtgcat ggaggcccg cagtgggtgag cggcgtcctg 420
 caggccttgg gcagcgtgcc agggcttcga ccggcggagg caggcgagtt cactagacgg 480
 gcgttcgcca atgggaagct gaacctgacc gaagtggagg ggctggcgga cttatccac 540
 gcggaaacag aggcgcagcg gcggcaggcc ctccaggcagc tggacggaga gctggggccac 600
 ctctgccgtg gctggggccg agaccctcac caaagctttt ggcccacgtg gaggcctata 660
 tcgatttcgg cgaaggatga caacctggga ngganggggt ncctggagca aggcccgaca 720
 tcgaaagtac 730

<210> 3180

<211> 819

<212> DNA

<213> Homo sapiens

<400> 3180

atcaatagaa acaagaccgg agagataaca gcctcctcca acaaatccct caacttgcta 60
 aaaatcaagc atggcgattt gttgttcctg tttccctcga gccttgctgg gccctcatct 120
 gaaatggaga cgtcagttcc accgggcttc aaagtctttg gcgctcccaa cgtgggtggag 180
 gatgagattg atcagtacct cagcaaacag gacgggaaga ttacagaag ccgagacca 240
 cagctatgcc gccacggccc tttggggaaa tgcgtgact gcgtccctct agagccattc 300
 gatgaggact atctaaacca tctcgagcct cccgtgaagc acatgtcctt ccacgcctac 360
 atccggaagc tgactggagg ggctgacaag gggaagtttg ttgccctgga gaacatcagc 420
 tgcaagatta agtcagggtg cgagggggcac ctcccgtggc cgaatggcat ctgtactaag 480
 tgccagccga gcgccatcac gctgaacaga cagaagtaca ggcatgtgga caatatcatg 540
 tttgagaatc acaccgtcgc tgaccgcttt cttgacttct ggagaaagac agggaaccag 600
 cattttgggt acttatacgg acggtacacg gagcaciaag acattcccct tggcatcagg 660
 gctgaagtgg ctgcgattta tgagccacct cagattggta cacagaacag cttggagctt 720
 cttgaggatc caaaagctga agtggtcgat gaaattgctg ccaaacttgg cctgcggaag 780

gttggctgga tatttacaga cctcgtctca naagatccc

819

<210> 3181

<211> 703

<212> DNA

<213> Homo sapiens

<400> 3181

agcatcccaa agaatttctt gtattcctaa aacccatatt tctaataagt atgggaataa 60
 tttcctccag gaagcacaca tgagagaaaa atctttccaa tgtaatgaga gtggcaaagc 120
 ctttaattgt agctcactgt taaaaaatg tcagataatc catttaggag agaaaaata 180
 taaatgtgat atatgtggca aggtctttta tcagaagcga taccttgcac accatcatag 240
 atgtcacact ggtgagaaac cttacaagtg taatcagtg ggcaagacct tcagttacaa 300
 gtcacccctt gtaattcaca aggcaattca tactggagag aaacctcaca agtgtaatga 360
 atgtggcaag gtttttaatc aaaaagcata ttttgcaagt catcatagac ttcatactgg 420
 agagaaacct tacaaatgtg aagaatgtga caaagttttt agtcgctaata cacaccttga 480
 aagacatagg agaattcata ctggagagaa accgtacaaa tgtaagggtt gtgacaaggc 540
 tttcagacgt gattcacacc tggcacaaca tattgtaatt cacactggag agaaccctta 600
 caagtgtaat gagtgtggca agacctttgt tcaaaattca tctcttgtaa tgcataaggt 660
 cattcatact gganagaaat gtccaggtgn aatnaatggg cca 703

<210> 3182

<211> 798

<212> DNA

<213> Homo sapiens

<400> 3182

tcagctcgca ctgcatatgc aacgcaactc aactcatgct gcgtatgcaa ctcaactcac 60
 actgtatgca actcagctcg ctctgcatat gcaattcaac tcgcaactgcg tatgcaaata 120

aacttactgc atatgcaact caactcactg cgtatgcaac tcaactcgca ctgcgtatgc 180
aactcaactc gcactgcgta tgcaactcaa ctgcactgc gtatgcaact cagctcgcac 240
tgcgtatgca actcaactgt tgcaagtact tatttcggc cacttccttt ttctaactac 300
cacaccaagc cagtatttct cctccctgaa gtcagcccag gatgaggcac tagacagcag 360
gacatgctgt atgcccttgg gcctgctgga agtatgcaga ctagccagcc ccagacttca 420
tcttgcctg tcttgccttt cctgtgaaaa ccctgtggcc tctgcctccc ctggctctga 480
cttctgcctc ctgcccagct ctgcagctcc ccttgggccc tgcctggagt gatgtgccgc 540
cttctcttga cactgtgagt gataaacttt ccatgtcagg aacctgtgtg tgtcactcac 600
tcaccttgac gagtccgcgt ctaggccccca ccagtgggtg ggttttctc atagtctctc 660
tacctaagca catgtctgtg acaaggtctt acccagcccc nggattcttg aactatctgt 720
aggaactgcc atgttgactc ctggcagttt tattctttct ctctactcgn tcaaccttct 780
tanggagtga cgtttttt 798

<210> 3183

<211> 825

<212> DNA

<213> Homo sapiens

<400> 3183

agacagatgg agaagttaga agtttttagag gaatggcagt ctacattga aggctgggag 60
gggtccaaca tcaactgacac ctgcactgaa atgctaattgt gtggagtctt actgaaaatt 120
tcttctggaa atattcaaga acgggtgttt tttcttttcg ataattcttt ggtgtactgc 180
aaaagaaaac acagacgggt gaagaacagc aaggcatcta cagatggaca tcggtacctt 240
tttctgtggc ggatcaacac ggaggtgatg gaagtggaga atgtggatga tggcaccgct 300
gatttccata gcagtggaca cattgttgtt aatggatgga agatacataa cacagcaaaa 360
aataaatggt ttgtttgtat ggcaaaaaca cctgaagaga agcatgaatg gtttgaagct 420
attttgaaag aaagagaacg gcggaaagggt ttaaaattag gaatggagca agatacctgg 480
gtcatgatct ctgaacaggg tgagaaaactt tataaaatga tgtgcagaca aggaaatctg 540
atcaaagacc gaaagagaaa actgactacg ttccctaata gctttcttgg aagcgaattt 600

gtgtcatggc tgttggaat tggagagatt cacaggcctg aggaaggcgt gcacttggga 660
 caagcattat tagaaaatgg aatcattcac catgttactg ataaacatca attcaaacca 720
 gaacagatgt tatatagatt tcctatgatg atggaacatt ttatccaaga aatgagatgc 780
 caggacgtga tttcnaangg tgtaagatta tattgccnct tcata 825

<210> 3184

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3184

acgttgcccg ggatgcggac aggttccgcc gcctccagcg ccccatcctg agccgattat 60
 ctgcaattat gaaatgaagt aactcaagat gagcaagtta aaagtgatac cagaaaaaag 120
 ccttaccaat aattctagga tcgtaggact cctggctcaa ctggagaaga tcaatgctga 180
 gccttcagaa tcagacactg cccgatatgt tacatcaaaa attcttcac tggctcagag 240
 tcaagaaaaa acaaggagag aaatgacagc caaaggttct acaggaatgg aaattctgct 300
 gtcaacatta gagaacacaa aagatcttca aactacactt aatatcttaa gcattcttgt 360
 tgagctggtg tcagctggtg gaggtcgaag agtgagtctt ttagtcacca aagtggttc 420
 acaaattattg ttgcagttac ttatgaatgc cagcaaagaa tctccccac atgaggactt 480
 aatggtacag attcattcta ttcttgcaaa gattggacca aaagataaaa aatttgaggt 540
 aaaggctaga attaatgggg ctctgaatat aaccctgaat ttggtcaagc agaatttgca 600
 gaatcatcgc ttggttctac ctgccttca gcttttacga gtatattctg ccaactctgt 660
 gaattcagta tccttaggga aaaatggagt tgtggaactg atgtttaaaa tcattggacc 720
 atttagtnag aagaattcca gtcttataaa ggttgcttta gacactcttg ctgcattgnt 780
 taaatcaaaa acaaattgcca ggagagctgt anacagagga tttgtccagt g 831

<210> 3185

<211> 824

<212> DNA

<213> Homo sapiens

<400> 3185

```

acattaaagc tatttaatta attattatta ttattathtt gagacagggt cttgctctgt    60
tgcccagact ggactgcagt ggcgtgatca tggctcactg cagcctcgac ctccagggt    120
caagcgatcc tcccacctca gcttcccaag tagcggggac tgcaggcaca tgccaccaca    180
cccagctatt tttttttatt gtttgttgag acagggtctc actatgttgc ccaggctggt    240
cttgaacttc tgggctcaag cggtcactt gcctcggcct cccagagtgc taggattaca    300
ggcaggaggc actgcacctg gccagaaaaa actattcttg acttcacatt ttccgccagc    360
ttcacccctg cccctttgct tctctttgca gcaaaacttc aaaaagcata gtccacgctc    420
tccccaggc attcttgggt ctctctaccc aggattttgc tccccatcg ccacatctcc    480
ttttgccaag ggcaccagag gcctccgtgt tgttggatcc agcggtcggc tctcagcctc    540
ctcttaactg ctcagtggca ctggtgccgc caagcaacc cttctccaag agagccacag    600
gctctgggat acttcactct ggggttctct ctacctcaca gactctcctg gctggctctc    660
ctcttctccc caacatctta tggccaggct ttcaggctct tttctgncta caggcactct    720
tcatgagtcc ttattcaagc tcctggcctc aaatgccagc tgtgctgaga ccccttatt    780
tgtagcttca gctancctgn tcttccctga acccaaactt atgt                        824

```

<210> 3186

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3186

```

aggctcaggc tccgacggtg gccggcgggg gtcacagggc ttcgtagtgg aggaacgggt    60
ttggcgtgtg ggacgcagct gcctctgtac tggggagtca cggagtggcc gggctccagg    120
gacatggcgg cggcctctgc ggtgtcgggt ctgctgggtg cggcggagag gaaccgggtg    180
catcgtctcc cgagcctgct cctgccgccg aggacatggg tgtggaggca aagaaccatg    240
aagtacacaa cagccacagg aagaaacatt accaaggtcc tcattgcaaa cagaggagaa    300

```

attgcctgca gggatgatgcg cacagccaaa aaactgggtg tacagactgt ggcggtttat 360
 agtgaggctg acagaaattc catgcatgta gatatggcag atgaagcata ttccatcggc 420
 cccgctccct cccagcagag ctacctatct atggagaaaa tcattcaagt ggccaagacc 480
 tctgctgcac aggctatcca tccaggatgc ggttttcttt cagaaaacat ggaatttgct 540
 gaactttgta agcaagaagg aattatTTTT ataggccctc ctccatctgc aattagagac 600
 atgggtataa agagcacatc caaatccata atggctgctg ctggagtacc tgttggtggag 660
 ggttatcatg gtgaggacca atcagaccag tgcctgaagg aacacgccag gagaattggc 720
 taccctgtca tgattaaagc cgtncgggt ggangangaa aaggaatgag gattggt 777

<210> 3187

<211> 854

<212> DNA

<213> Homo sapiens

<400> 3187

tgttgcttga gaaatggcga tgatcgaatt ggggtttgga agacagaatt ttcattccatt 60
 aaagaggaag agttcatcgc tgttgaaact catagctgtt gtctttactg tgcttctatt 120
 ttgtgaattt ttaatctatt acttagcgat ctttcagtgt aattggcctg aagtgaaac 180
 cacagcctct gatggtgaac agaccacacg tgagcctgtg ctcaaagcca tgtttttggc 240
 tgacacccat ttgcttgggg aattcctagg ccactggctg gacaaattac gaagggaatg 300
 gcagatggag agagcgttcc agacagctct gtggttgctg cagccggaag tcgtcttcat 360
 cctgggggat atctttgatg aagggaagtg gagcaccct gaggcctggg cggtatgatgt 420
 ggagcggttt cagaaaatgt tcagacaccc aagtcatgta cagctgaagg tagttgctgg 480
 aaacatgac attggcttcc attatgagat gaacacatac aaagtagaac gctttgagaa 540
 agtgttcagc tctgaaagac tgttttcttg gaaaggcatt aactttgtga tggatcaacag 600
 cgtggcgctg aacgggatgg ctgtggcatc tgctctgaaa cagaagcaga gctcattgaa 660
 gtttctcaca gactgaactg ctcccagag gtaggagagc atctgaatgc cacaggtgcc 720
 ttctgtcccg tgttgctccg ctcccggttg ctacttcag cccctagcc gcttcttgcc 780
 cttttgatga aggttcaagg tgtgccgat taatggcctg gactttgtac cccancangc 840

accgtggntt ccag

854

<210> 3188

<211> 829

<212> DNA

<213> Homo sapiens

<400> 3188

gaaaaacata ctattccttt ggtagtccag aaagaaacat catcttcaga taataagaaa	60
cagataccta atgaagcttc tgctagaagt gaaagagaca catcagacct agagcaaaac	120
tggtcattgc aagatcatta tagaatgtat tcaccataa tataccaagc cctctgtgag	180
cacgtgcaga ctacagatgtc actgatgaat gacttgactt caaagaacat ccctaattgga	240
attcctgctg taccatgcca tgctccctct cattctgaat ctacaggcaac tcctcattct	300
agttatggct tatgtacctc caccacagtc tggtcacttc agcggccacc ctgccctcca	360
aaggttcatt ctgaagttca aactgatggc aacagtcagt ttgcatcaca agaggattca	420
gaaattcaga gggttgattac agaaatggag gcatgtatat ctgtacttcc aacagtaagt	480
ggaaacacag atattcaagt tgagatagca ctggccatgc aaccattaag aagtgagaat	540
gctcagttac gaaggcagtt gagaattttg aaccagcaac tcagagaaca acagaaaact	600
caaaaacat ctgggtgctgt ggattgcaac cttgaattgt tttctcttca gtcattgaat	660
atgtcactgc aaaatcaatt ggaggagtca ctaaagagcc aggaattact gcagagtaaa	720
aatgaagagc tggttaaagt gattgaaaat caagaangat gaaaaccaa aatttagtag	780
tatattttaa ggccaaggat caaactatac ttggaaaatt aaccgcant	829

<210> 3189

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3189

gaactcgtca tgctctttgt agcgtggtgc ttctgttgct cacaggatgt ttgccacacg 60
 agtcaactcga gagaatctct gagtcctggc gagggctttc tgaggcttcg tgtattagca 120
 gctgttgctc tccaactcag cggcaggaca acttgccctt gatgattttc aagagagttg 180
 tgctatgatg tggcaaaagt atgcaggaag caggcgggtca atgcctctgg gagcaaggat 240
 ccttttccac ggtgtgttct atgccggggg ctttgccatt gtgtattacc tcattcaaaa 300
 gtttcattcc agggttttat attacaagtt ggcagtggag cagctgcaga gccatcccga 360
 ggcacaggaa gctctgggcc ctctctctca catccattat ctcaagctca tcgacaggga 420
 aaacttcgtg gacattgttg atgccaagtt gaagattcct gtctctggat ccaaatacaga 480
 gggcctttct tacgtccact catccagagg tggccctttt cagaggtggc accttgacga 540
 ggtcttttta gagctcaagg atggtcagca gattcctgtg ttcaagctca gtggggaaaa 600
 cggatgatga gtgaaaaagg agtagagacg acccagaaga cccagcttgc ttctagtcca 660
 tccttccctc atctctacca tatggccact ggggtggtgg cccatctcag tgacagacac 720
 ttctgcaacc caatttttca gccccantg ggatgatgtg gtctggaact gaaagtgatg 780
 cctatttctg agttatgcct gnatttaaga actgatgaan cccaagaagt ccatgat 837

<210> 3190

<211> 853

<212> DNA

<213> Homo sapiens

<400> 3190

cgatgaagat gaagaggata atcttttttg gggtagacgt gctaagaagc agacattgtc 60
 tctacaagct cagagagaag agaaagcaaa agcctccgag ctctccaaaa agaaagcatc 120
 tgccctgttg ttcagcagt atgaggagga ccagtggat attcctgctt cacagacca 180
 cttagcatct gacagcaggt ctaaaggaga acccagggat tctgggaccc tccagagcca 240
 ggaggccaag gctgtgaaaa agaccagtct ctttgaggaa gacaaagaag atgatctttt 300
 tgccattgcc aaggacagcc aaaagaagac ccagagagtg tcactcctct ttgaagacga 360
 tgttgatagc ggaggctctc tgtttggtc tcctcccaca tctgttcctc ctgcaacaaa 420
 gaaaaaagag actgtctctg aggcaccacc tttgctgttc agcgatgaag aagagaagga 480

ggcacaactt ggagtgaagt ctgtggataa gaaggttgag agtgccaagg agtcattaata 540
 atttgggaga actgatgtgg ctgagtcaga aaaggaagga cttttgacta gatctgctca 600
 ggagacagtc aagcattctg atttattttc ttcattcatcc ccatggggaca aaggaaccaa 660
 gcctagaacc aaaactgttc ttagcttggg tgatgaggaa gaggatnaaa tggaagatca 720
 aaacattatc cangttcac agaaagaagt aggaaanggc tgcgatcctt gatgcccacc 780
 ccaagagccc aggtgtcttt caggatgaaa agctgctttt cagccccaag cttcaaaagg 840
 gcaatgancc cnt 853

<210> 3191

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3191

agactccgtg ggcgtaggac cctccgagcc aggtgtggga tatagtctcg tgggtgcgccg 60
 ttttttaagc cggctgaaa agcgcaatat tcgggtggga gtgacccgat tttccaggct 120
 gctatccatg tccagggcc aacatgaatc ctattgctct tgggagccgc tggcttgctt 180
 atgcagaaaa caagttgatt cgatgtcatc agtcccgtgg tggagcctgt ggagacaaca 240
 ttcagtctta tactgccaca gtcattagtg ctgctaaaac attgaaaagt ggcctgacaa 300
 tggtagggaa agtgggtgact cagctgacag gcacactgcc ttcaggtgtg acagaagatg 360
 atgttgccat ccacagtaat tcacggcgga gtcctttggg cccaggcatc atcacagtta 420
 ttgacaccga aaccgttga gagggccagg tgcttgtgag tgaggattct gacagtgatg 480
 gcattgtggc ccacttcccc gcccatgaga agccagtgtg ctgcatggct ttaatacaa 540
 gtggaatgct tctagtcaca acagacaccc ttggccatga ctttcatgtc ttccaaattc 600
 tgactcatcc ttggtcctca tcacaatgtg ctgtccacca tctgtatact cttcacaggg 660
 gagaaactga agccaaagta caggacatct gcttcagcca tgactgtcgc ttgggttgtg 720
 gtcagtactc ttcgggggtac ttncacggtt ttcccatca acccttatgg tgncaacct 780
 tgtgttcgta cacatatgtc accacnagta gtgaatccat gagccgtt 828

<210> 3192

<211> 763

<212> DNA

<213> Homo sapiens

<400> 3192

```

aaaaaaaaa aaaaaattgg tgttttgtta gataatctgg gttcatcttt caaaattcag 60
aaaatacaga cctgtaaaga ggaaaaggaa gactcctata attccatcat tcaaaagcaa 120
tcaactgttaa ctgaatttat tgtttttagac ttttttcttg catttatgta aacctgactt 180
ttcagaatta ggatttatac tgtatacgat gttttgtgac tgatatacagc atttagagcc 240
atacagagaa tgtttttcat tatgcttaag aactacataa tgttccattg tgtgggtgta 300
caaagttgat ccagttctct acatttgggc atttaggtta ttttcaatag ttgcatcca 360
atagaacata ttcttacaaa taaaatctgt ccatgtatcc aaggatagtt ccatttgttt 420
taagttttga ttttatcact attacatcac tataccaaat atcccccaa agattatacc 480
agtaaatgtc ttttaaaata taataataaa taccagccgg gtgcagttgc tcacgcctgt 540
gatcccagca ctttgggagg ccgaggcggg cagatcactt ggggtcagga gtttgagacc 600
agccttggtg acatggcaaa acccttctct actgagaata caaaaattag ccggtcatga 660
tggcggccac ctgtggtccc agctgctcag gaggtgagg caggaggatg gcttgagccc 720
cggagggttg angttgcagt gagctgaggn tgcccactgn act 763

```

<210> 3193

<211> 841

<212> DNA

<213> Homo sapiens

<400> 3193

```

agtaattttc agctcacaaa tgatgaagaa atccataacg tcggaacttc cttgaccttt 60
ggatttggtg cattgacctg ctggatccag gctgcgctga cactcaaggt caacatcaag 120
aatgaaggac ggagagttgg aattccacgg gttattctgt cggcatctat cactctctgt 180

```

gtggtcctct acttcatect catggcccaa agcatccaca tgtatgcagc caggggtccag 240
 tggggcctgg tcatgtgctt cctgtcttat tttggcacct ttgctgtgga gttccggcat 300
 taccgctatg agattgtttg ctctgagtac caggagaatt tcctaagctt ctcagaaagc 360
 ctgtcagaag cttctgaata tcagactgac caggtgtaaa ccatcagttt ttccttgctg 420
 gtgaggtggg tgtgacagtg ggggaggggc cagtaggaca cactcacagg acttgacata 480
 gaacctcatt tcacacacac acacacacac acattcatgg ccacatttgc caaatgagct 540
 tttcagggcg agttatttct ttaatgaaaa agcacaagcc cttatgtgtc gaaatacacg 600
 ctgttacact gaaaatatat gcacgacaga gcaagaagct tgtgcatgat cacttcttat 660
 ccgtccccct tccagcactt ctttctcttc cattctcttc acatgtctna agcacccctac 720
 cgagtagggc aggccaaatg ttccttggga gtaatgcaa cttccgacgt tgccttcagg 780
 tcccaanggc ttggaaccag ctctgtgagga agttctgaat ctgcactaat attcttgagt 840
 g 841

<210> 3194

<211> 848

<212> DNA

<213> Homo sapiens

<400> 3194

tggggcagaa aagtaataca gacggagcac tgcagaaacc ttcaaatgaa ggtgtcattg 60
 aaataaaagc aactaaggct tgtgaccaga ggaccaaagt taaaagtcgc tgtaatgaaa 120
 tgctgccagg cacgtcaaca ggcaataatc aaagcactat cactctatca gttgcttctc 180
 agaacttaac tttcaccagc agcagctcac cacctaattg tgactcaatc aataaagacc 240
 ctaaattatg cactaaaagc ccaagaaaac gactgtcttc tacattgcaa gagaccagc 300
 tgcctcctgt aaagaaacca attgtggaac agctttcagc agctaccata gaagggcaga 360
 aacaaggcag tgtaagaag gaccaaagg ttccacattc agggaaaaca gaaggttcaa 420
 cagcaggtgc tcagattcct agcaaggat cagtaaatgt cagttcacac ataggagcaa 480
 atcaaccctt gaattcctct gcccttgta tcagtgttc agctttggaa cagcaaacaa 540
 ccccatcatc atctccagat ataaaagtaa aacttgaagg aagtgtcttt ctcttgaca 600

gtgattcaaa gtcagttggc agctttaatc caaatggatg gcaacaaatc actaaagatt 660
 ctgagtttat atctgccagt tgtgaacaac agcaagatat cagtgttatg acaattcctg 720
 agcactctga tatcaatgac ttagagaaat ctgtttggga attagnaagg aatgccacag 780
 gacacatata gncagcagct acatagccag atccaggaat cttcttttaa tcaaatccaa 840
 gcncattt 848

<210> 3195

<211> 653

<212> DNA

<213> Homo sapiens

<400> 3195

aggccatgta aaaattttcc gtggagaagt ttgattctaa agtagcttct ctaaagtagg 60
 ctttggtagg taatcaactt gacagcagtc tagatgtctc acaggacagg agggagttag 120
 ggaaaggggc catgattggc tgctttgtgg ttttatittg gttctttcca ttctccgcca 180
 ttcattggag gcttcgttcc agacctgcct gggaaaacag cttctgagcc attttgggga 240
 gcagttcttc atctgaatgg atggacatct gggcttcctt caagggccat tgaatgggaa 300
 ctagaaaacc actggaaact agaaatttga gctattgggc ccaccagtag cagcatgtga 360
 tactagatgg ttaaaatcat gaaagcagtc actatccaat tagaagcaga gtcacaacaa 420
 ctgttgggaa atgtgactct tggaggaagg tggggaggga gtggccttgc cagccctgtg 480
 ggacgtcccc tgaagtttgt aataagacct cttttccaaa gggatgtgaa ttggagtga 540
 aaggaaatct ttcacttan aaaacttctg gtccttaacg canggtggta tttgggtatg 600
 tgcttggaaa ttgagatctc aagagtgttt gccttggagc cagctcccca nga 653

<210> 3196

<211> 836

<212> DNA

<213> Homo sapiens

<400> 3196

ttgtcttctg	cagctgactc	aggtcattga	tgtttgctcc	aattttctca	taaaacagct	60
ccatccttca	aactgcttag	ggattcgatc	atttgagat	gcccaaggct	gtacagaact	120
tctgaacgtg	gcacacaaat	acactatgga	acacttcatt	gaggtaataa	aaaaccaaga	180
attcctcctg	cttccagcta	atgaaatttc	aaaacttctg	tgcagtgatg	acattaatgt	240
gcctgatgaa	gagaccattt	ttcatgctct	aatgcagtgg	gtggggcatg	atgtgcagaa	300
taggcaagga	gaactgggga	tgctgctttc	ttacatcaga	ctgccattac	tcccaccaca	360
gttactggca	gatcttgaaa	ccagctccat	gtttactggg	gatcttgagt	gtcagaagct	420
cctgatggaa	gctatgaagt	atcatctttt	gcctgagaga	agatccatga	tgcaaagccc	480
tggacaaaag	cctagaaaat	caactgtggg	ggcactttat	gctgtaggag	gcatggatgc	540
tatgaaaggt	actactacta	ttgaaaaata	tgacctcagg	actaacagtt	ggctacatat	600
tggcaccatg	aatggccgta	ggcttcaatt	tggagtcgca	gttattgata	ataagctcta	660
tgctgtggga	ggaagagacg	gtttaaaaac	tttgaataca	gtggaatggg	ttaatccagt	720
tggcaaaaatc	tggactgtga	tgcccttccat	gtcaacacat	nggcacggct	tagtgtacca	780
ctcttgaagg	accaatgtat	gctgnagtgg	catgatggat	ggagctttct	aatct	836

<210> 3197

<211> 789

<212> DNA

<213> Homo sapiens

<400> 3197

tttcctaaaa	ttctagaatc	ccttaaaaaa	aaaaaaactc	atgtaatagt	actcataaag	60
tctactcatg	attctccaac	ctccaggctg	gactggactt	agcccagcct	aaaagatgaa	120
agtgtgtgtg	tgtgttacat	atagataaca	tatgtgttat	atataggtat	tacacataac	180
atctatataa	aagtatactt	tttttggctc	acattaaaag	gattcaacaa	tcttttttta	240
ctaaccaccag	acatcatact	tccaaaagca	catctttaag	atcctgctac	tgaattttga	300
atttgtttgc	taagctcatt	agagatgaaa	aacaactgct	cgtcatttac	aattcatcag	360
ctggttcgga	gtaagaaaat	ctctctctct	ttctctctgt	ctctctgtct	gtctgtccgt	420

ctctctctct ctctctcaca cacacacaca cagagagaga gagagagaga gagagagtgc 480
gagagagacc attatacccc agccttattt ctaacttaaa ttctaacatt agatttgatg 540
cagatatttt agctgctaac aggaagtgtt atctcctttt ctatgagatg cctgggcttc 600
cctaaagtgg tgctcatctt tttttttttt tttttttggc tataaatata tgaaagagtc 660
tgtcaagagt gcctgcaggg aatgaaagtg aaagtgcagt aaagagcaag tttatgagtt 720
ggcancctga gtgactggct nctaaacagg ggcccatctg gtctggggnt gccttgggaa 780
tctctctcg 789

<210> 3198

<211> 803

<212> DNA

<213> Homo sapiens

<400> 3198

tctttatgct ttcggatttc taaatgagag agtcatccag aaactcgagg ggtggagagc 60
atttgtcagt gactgtcctt tgggtcccaa ggggctcctc agtgggtttc tcctgagggt 120
ctgtgactac tctcctgtca cagaagctgc tcctctctgg cactgtcttg tccttctcca 180
ctgacctctg ggattgacta tccttctcag caggggtgac tgtgacactc ctggctgttc 240
cttctcagtc ttggctggtc cttcactcct agctggctcct tctccacaac tgggacactc 300
tgctatgctt ggttttgaac tagtgacagc ctctcccttc cttttcggca ttgatttccc 360
tggatgccct ggtagcctc caggtagatc attgtggagc cctgatgtcg aagtctatcc 420
gtcttccttt tctggacctt gttgggttcc tcagtcgtat cattctgact ctcagcttca 480
gttgcaaatt aagagttcat ggaattacga gaactatctt tggaatcagc cttaaagctg 540
caggcttcct tttctagaga agctatttct tctagaaagg gattggtagg atgtggaggg 600
gttccccctg acgaaaggaa tccctgagtg ctctgaatca ngcagccttt ggtggcggcc 660
ccgcccacac ctgtgccga ggaatgccgg ggaggaatgt aagagttaaa gaaaggaaag 720
aaacaggaaa agcngntcac agtcaaagac aggtttgttt tggacaataa acctgaaaag 780
gccttntggg ccgaattagg tca 803

<210> 3199

<211> 770

<212> DNA

<213> Homo sapiens

<400> 3199

```

aagcagaatg gcagacagaa cctcaggagc ccccatccc tgagtcctg gccgctgcag   60
ccgctgccgc ccaacagctc caagtggcta ggaagcagga tactcggcag acggccacct  120
tcaggcagca gccccacct atgaaggcct gcttgtcatg tcaccagcaa attcaccgga  180
atgcacctat ntgccctctt tgcaaggcca agagtcggtc ccggaacccc aaaaagccga  240
aacggaagca ggatgaataa agaaaggag agcacatgaa gctttgctaa ttataacccc  300
tcaccttgac cagagtcatt gatgtcctga tgtgaaacaa cccttgccca accccacgaa  360
gtctcctatt taatgtgatg gaagcacaac ccctctctca ctttgctcct atttctttct  420
gctcttgga tttctggttt aggaaganat gtggttcagg tgctaaacag tgtgtctgat  480
gatecccttct ctccactca catttcaacc cctgcccttg tttggagcta agggaagggc  540
aaaaggctca gatatgattc tctatctctt gtgcctgagg cctggagcct aaggagctgt  600
aaggtctgag gggcagggga ggcccatatc ttgtttcagg taaaggaccc actatttccc  660
ctccttgtag ttttgctta ngttctcang ggacaatagn cttcatgttg gattcttcaa  720
caggctgggt gcatgtatcc cctactccta cctcatctc atccttaagg   770

```

<210> 3200

<211> 757

<212> DNA

<213> Homo sapiens

<400> 3200

```

gtgcatacgg ctgccggcat ggcacattac aacttcaaga aaattacggt ggtgccgtcc   60
gccaaggact tcatagacct cacgttgtcg aagactcaac gaaagactcc aaccgttatt  120
cataaacatt accaaatata tcgcattaga catttttaca tgagaaaagt caaatttact  180

```


caacagaatt accatgatag actttcaciaa attctaacag atttccccaa attggatgat 240
 attcatccgt tctatgctga tttgatgaat attctctacg acaaggatca ttacaagttg 300
 gctctggggc aaataaatat tgccaaaaat ttagtggaca atgttgctaa agattatgtg 360
 cgactgatga agtatggcga ctctctctac cgctgcaaac agctgaagcg tgcggccctg 420
 ggacggatgt gcacagtgat caagaggcag aagcagagtt tggagtattt ggagcaagtg 480
 cgtcagcatt tatcccgttt gcccaaccatt gatccgaata ccaggaccct gcttttgtgt 540
 gggtacccaa atgttgggaa gtccagcttc atcaacaagg tgacgagagc agacgtggat 600
 gtccagccct atgcgttcac aaccaagtct ctgtttgttg ggcacatgga ttataagtat 660
 ctacgttggc aggttgtaga cacttctggg atcctggacc accctntgga ggataggaac 720
 accattnaga tcaggccatn actgcctggc cacttcg 757

<210> 3201

<211> 768

<212> DNA

<213> Homo sapiens

<400> 3201

atccaagatg gcgtccccag gagctggggag cgggtgaccg gcggcgggga agcggncctgg 60
 gttggccctc agattgcggg gtctgggggc atctcgccgg gcaaaccctt ggcccgccta 120
 caaggacttc ccccggccag agcaatggcc gctgagaaca gcaagcagtt ttggaagagg 180
 agcgctaagc tgccggggag cattcagcct gtatatggag cacagcatcc tcctcttgac 240
 ccacggctca ccaaaaattt cattaaagaa cgatcaaaag tcaacacagt tcctctgaag 300
 aataagaagg cctccagttt tcatgagttt gcacggaata ccagtgatgc ttgggacatt 360
 ggcgatgatg aggaagagga cttttcctca cttctttcc aaactctgaa ctcaaaagtt 420
 gctttggcaa ctgcagccca agttctagaa aaccacagca agctgagagt aaaaccagaa 480
 cgggtcccagt caacgacatc ggacgtccct gccaaactaca aggtcataaa gtccagcagt 540
 gatgcccagc tgtccagaaa ctctagtgat acatgcctga ggaaccact ccacaaacag 600
 caatcactcc ctctccggcc catcatcccc ctcgntgccc ggatctcgga tcagaacgct 660
 tctggggccc ccccaatgac tgtccgggag aaaaccgct agaaaaattc cgtcagcttc 720

tnttcagcca naacactgac ttagatgaac tgaggaagtg tancttgg

768

<210> 3202

<211> 815

<212> DNA

<213> Homo sapiens

<400> 3202

aagcgtcgca cagcgactgc atcaccatgg agccgagggc agtaggtgtn tccaaacagg	60
acatacgtga acaaatttgg ggctacatgg aatcacaaaa tttagctgac tttccccgac	120
ctgttcatca caggataccc aactttaagg ggtcttatct ggcttgccaa aacatcaaag	180
acctagacgt ttttgccaga gcacaggaag ttaaagtgga ccctgataaa ccactggaag	240
gcgttcggct gctgggtgctg cagagcaaaa aaacattgtt ggttccaaca ccacgactga	300
gaacgggatt gttaataaag atcacaccac cccctggggc aactaaagac atcttgagaa	360
aatgtgccac ctctcagggt gtgaggaact acagtgtccc cataggcttg gactccagag	420
tcctcgtgga tttagttgtg gtgggatccg tcgccgcttc tgaaaaaggc tggagaatcg	480
ggaagggaga aggctacgcc gatctggaat atgccatgat ggtatccatg ggccgctca	540
gcaaggagac gccggtggtc accatcgtcc acgactgcca ggtcgtggac atccctgaag	600
agcttggtga ggagcacgac atcactgtgg actacatcct cacttcaacc agagtcacg	660
ncacaggctg caagcgccca aagccaatgg gaatcacctg gntcaagatc agcctggaga	720
tgatggagaa aatccccatc tgaggagcct tcgngcccga aagcacaggc tgggaaggat	780
gtcacccttc anggtgagca ccaacaacct tteng	815

<210> 3203

<211> 512

<212> DNA

<213> Homo sapiens

<400> 3203

atgcgcggcg cggctggagc ggccggacag tccggcgctc gggaacgctc aggagccgga 60
 ggagccggaa agcgccggga cccctcgcgg ggcctctgag cggcgcgggc ggacccgagc 120
 cccagccccg ctggcgccgc tgcccgccag gccccggggg cggcggccaa gatgtccgtg 180
 cctaacgtgc tggccaaagc gctctatgac aatgtggccg agtccccgga tgagctctcc 240
 ttccgcaagg gtgacatcat gacggtgctg gagcaggaca cgcagggcct ggacggntgg 300
 tggctctgct cgctgcatgg gcgccagggc atcngcctg ggaaccgcct caagatctcg 360
 gtgggcatgt atgataagaa gccagcaggg cctggctccg gccctccgc caccgccgnc 420
 cagcctnagc ctggcctcca tgcccagcg cctccggcct cccagtacac gccatgctc 480
 nccaacacct accagcccca gccagacagc gt 512

<210> 3204

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3204

attgcttctg ggactaaaag ataaagaggg gtacacatct ttctggaatg actgcatatc 60
 atcaggcctg cgagggggca tcctgataga gctggccatg cggggtcgaa tctatctgga 120
 acccccgacc atgcgtaaga agcgactact agacagaaag gtactgctaa agtcagacag 180
 cccaacaggt gatgttttac tggatgaaac tctgaaacac atcaaagcaa ctgaaccac 240
 agaaactgtc caaacatgga tagagctact cactggtgag acctggaacc ccttcaaatt 300
 acagtaccag ctgagaaatg tacgagagcg catcgcaaag aacctagtag agaaaggtat 360
 tctaaccact gagaagcaga atttctgtct atttgacatg actactcatc cagtaccaa 420
 tacaacagag aaacagcgac tagtgaaaaa acttcaagat agtgtagtag agcgggtggg 480
 aatgaccct cagcgatatg acaagcgaac actagcactc ctggtgctag ccactcctc 540
 tgatgtgcta gagaatgtct tctcctctct gacagatgac aagtatgatg tggcaatgaa 600
 tcgagccaag gacttagtag aactggaccc tgaagtggaa gggacaaagc ctagtgccac 660
 agaaatgac tgggctgtgc tggcagcctt caataaatct taaagcccgg cangtggatt 720
 tcttcttttn ccctgctggc tggtgactgt caanagaccc ccatcactgg agttttg 777

<210> 3205

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3205

```

atctaaacaa gaaagtagtg agagtttgcc aaangaagcc tttctggtcc tctctgatga 60
agaggatatt tcgggtgaaa aagatgagtc tgaagttata tcgcaaaatg aaacgtgctc 120
tccagcagaa gtagaaagta atgaaaagga caacagacct gaggaagaag agcaagtaat 180
acatgaagat gatgaaagac cttctgagaa aaatgaattt tctagacgaa aacgttctaa 240
atcagaagac atggacaatg tacagtctaa acgtcgtcga tataatggaag aagaatatga 300
ggcagaattt caagtaaaga ttacagccaa aggagacatt aaccagaaac ttcaaaaggt 360
tatacagtgg ttgctggaag aaaaattgtg tgcgctgcag tgtgctgtat ttgataagac 420
tttggcagaa ttgaaaacac gagtggaaaa gattgaatgt aacaagaggc ataaaacagt 480
tctcactgaa ctacaggcca agatagccag gttaaccaaa cgctttgaag cagccaaaga 540
agatcttaag aaaagacatg aacatccacc caaccacca gtatcaccag gaaaaactgt 600
aaatgatgtc aacagcaata ataacatgtc ttacagaaat gcaggcacag tgagacagat 660
gctggagtcc aaaagaaatg taagcgagag tgcaccacca tnccttcaaa ctcctgtgaa 720
tacagtatct tcaaccaatc ttgncacttc ttcagcagtt ggtcagtagt caacctaaat 780
tgccagactt ccantggctt cnggggtt 807

```

<210> 3206

<211> 856

<212> DNA

<213> Homo sapiens

<400> 3206

```

gaccctgttt ctctagccgt gcagctgcaa ggctactaga cagaaaaact caagtcataa 60

```

acatgttttt tcttgaaagg gcagtagtca gaaaagaaag gaactgatct tggacttgaa 120
 gaaacagccc cagaggtgaa agagatagtc gttaacctgc acagcctctt tccagcctct 180
 tcacagataa caagggcttt cggaacaaga aacttgtata ttctgtgcag ctcaaataaa 240
 attaagaagc tgaacatcag ttgacaaaga gtaaaaaata actgggagtt gacgggaaaa 300
 taaactgtcg tttatgaaaa tgtagcttat tccagaacac cagatttcaa aagatacaga 360
 atcctgttgc tccacaattc aatttgtcct acaaaaagca aatatagtaa atagaagttg 420
 ccaacactga agagaagatt aacaaatctg agcatcccaa tggagcagac aacatgttca 480
 gaccatccaa agatccaaat ggcaggtttg atcactccaa ttgacaccag gtacaagcca 540
 ggtaatgtag taatcatggg atcccacttt aaaatgaaag aaaatgaagt aaaagcaaga 600
 ggtaatagga acaagacagg cacaaatatg tcaagcccaa gtctcatctt cagcaacaat 660
 cagaaatttt gagaagttat tctatgacaa gattaagtaa gtccttggca gaacaggatt 720
 cgtttttcct attttttgcc cccggaccaa gctttaatga tggntcangt agcagcaacc 780
 aattaaacaa caacaactta aaatctattt ctatttttcc aagaaatgtt ctttaaaagc 840
 ctttattttg atnaat 856

<210> 3207

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3207

tccgggttcg gcaataacct ggagccggcg gcgtaggttg gctcttttagg gcttcacccc 60
 gaagctccac cttcgtccc gtctttctgg aaacaccgct ttgatctcgg cgggtcgagg 120
 caggtacctc ccggtgctg cgggtgccct ggatccagtc ggctgcacca ggcgagcgag 180
 acccttcctt ggtggaggct cagagttccg gcagggtgca tccggcctgt gtgtggcgcg 240
 aggcagggaa gccggtaccc gggtcctggc cccagcgctg acgttttctc tcccctttct 300
 tctctcttcg cggttgcggc gtcgcagacg ctagtgtgag ccccatggc agatacgacc 360
 ccgaacggcc cccaaggggc gggcgctgtg caattcatga tgaccaataa actggacacg 420
 gcaatgtggc tttctcgctt gttcacagtt tactgctctg ctctgtttgt tctgcctctt 480

cttgggttgc atgaagcagc aagcttttac caacgtgctt tgctggcaaa tgctcttacc 540
 agtgctctga ggctgcatca aagattacca cacttccagt taagcagagc attcctggcc 600
 caggctttgt tagaggacag ctgccactac ctgttgtatt cactcatctt tgtaaattcc 660
 tatccagtta caatgagtat ctccaagtc ttggtattct ctttgcttca tgctgccaca 720
 tatacgaaaa aggtccttga cgcaaggggc tcaaatagtt tacctctgct gaatctgnct 780
 tggacaaatt aagtgctaata caacaaaata ttctgnaatt cattgcttgc aatgnaatat 840
 tcctgatgcc tgcaaag 857

<210> 3208

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3208

ctcccagggc atagaattac tgagttagaa gaaataactg gtttattttt acataggatg 60
 tgatgtctaa tattgtacta aaaatgagga tgcttatgct atactccact ggtactatcc 120
 actggattta tttatttttt ttattttttg agacggagtc tcgctctgtc gcccaggctg 180
 gagcacagtg gtgcaaactt ggctcactgc aagctctgcc tcctgggttc acaccattct 240
 cctgcctcgg cctccagagt agctgggact acaggtgccc gccatcacac ctggctaatt 300
 ttttttgtat tttttagtag agacgggggt ttcaccgtgt tggccaggat gccctcgatc 360
 ttctgacctc atgatccacc cgcctcggcc tcccaaatg ctgggattgt aggcgtgagc 420
 taccgcacct ggctgttttt gtatttagat agagttaag tgcaaagtaa tctgctgatt 480
 taaggttggt ttaaattcat atctgaggaa taaaggatgg acaggcaatt tccatccctt 540
 tgatgttcca taattctagc tatttatatc attcatttgc cccttcagca tggattggct 600
 tacacctgta atacgttcca gaatagctgg atttcttttg ttttcccatc ggtgattttc 660
 atagagtaga tgctcaatga catataatgc agaaaggcca aaaatagagg taagtaaagc 720
 tatgaaagaa aagaagaacg aaagangaac agagtagttt gatttttggtt attgctgctt 780
 aaaccagaga gattgtattc ttggaagggg atttgcttgn tttacncatt tgcagcctga 840
 ctggttttagg cttggttttt 860

<210> 3209

<211> 863

<212> DNA

<213> Homo sapiens

<400> 3209

```

agctgatttt ctgacagccc cttctcctct cctcactgga tatccagttt ccagggtctg   60
tgtgtggtgg gaagcaaact ggcctgaggt tccatccact ggtagaaatg accccaaaga  120
cttcccatgc agggagggca aagaagaaag tgctttggaa tggagatacc ctttttcctc  180
ctcctgaatg tatcagagtt agttatcaat gctgactgag tgtgcactct cctagacacc  240
atggggagag gcagaagagg aaaccagata tggtccttct tcttgggact ctcctgacct  300
aggaaaagag acagatgaat gcagataact gagtctatat acagggactg ccacaagctc  360
acactttact gaatgttcag acctagtcac acatcctaag ggcatgtgtg gaagcttctg  420
gaactaagtc tctggggatt tgaatcaact cagaagactg actcattcac ttggctgtgg  480
aggctgttcc agatattagg agctatgtat gtggagcccc ggatttgggc caaaagatgc  540
atttgactgg agagaaggga ttgagatttg agcagttggt ggacaacaca gaaatgaaac  600
agccatagca aacttgcctg ccgtgatttc tctgctgaga taatgggact tttcagactc  660
cctgtaactg agatctagat naaaagagac gtctggaaaa aaactgggtcc caattgncgc  720
ttggctttgc tttcataact atctgaatgt ggcatatgtc agactttgaa atgctgggtc  780
tcttggaaat ncnaatccat ctgggtcttg gataattncc agaaacctag gctctcagta  840
ggaaatgagg actggaaaca tta                                     863

```

<210> 3210

<211> 782

<212> DNA

<213> Homo sapiens

<400> 3210

aaggaagtcc cacctgcgcc cgacggcgga agttccggga gtgccaagta cccgcgtgca 60
 tacggctgcc ggcatggcac attacaactt caagaaaatt acggtggtgc cgtccgccaa 120
 ggacttcata gacctcacgt tgtcgaagac tcaacgaaag actccaaccg ttattcataa 180
 acattaccaa atacatcgca ttagacattt ttacatgaga aaagtcaaat ttactcaaca 240
 gaattacat gatagacttt cacaattctt aacagatttc cccaaattgg atgatattca 300
 tccgttctat gctgatttga tgaatattct ctacgacaag gatcattaca agttggctct 360
 ggggcaaata aatattgcc aaaaatttagt ggacaatgtt gctaaagatt atgtgcgact 420
 gatgaagtat ggcgactctc tctaccgctg caaacagctg aagcgtgcgg ccctgggacg 480
 gatgtgcaca gtgatcaaga ggcagaagca gagtttgag tatttgagc aagtgcgtca 540
 gcatttatcc cgtttgccaa ccattgatcc gaataccagg accctgcttt tgtgtgggta 600
 cccaaatgtt gggaagtcca gcttcatcaa caaggtgacg agagcagacg tggatgtcca 660
 gccctatgcg ttcacaacca agtctctgtt gntgggcaca tggattataa gtatctacgt 720
 tggcaggttg tagaccttc tgggatcctg ggaccacct tntggaggat nggaaccccc 780
 tt 782

<210> 3211

<211> 851

<212> DNA

<213> Homo sapiens

<400> 3211

acttccggga acgccgggga accgcagtag ccgcctgcta gtggcgctgc tagccggccg 60
 gcgcaggctg ccgagcgggt gagcgcgcag gccaggccaa agccctggta cccgcgcggt 120
 gcgggcctca gtctgcggcc atgggggcgt ccgcgcggct gctgcgagcg gtgatcatgg 180
 gggccccggg ctcgggcaag ggcaccgtgt cgtcgcgcac cactacacac ttcgagctga 240
 agcacctctc cagcggggac ctgctccggg acaacatgct gcggggcaca gaaattggcg 300
 tgttagccaa ggctttcatt gaccaaggga aactcatccc agatgatgtc atgactcggc 360
 tggcccttca tgagctgaaa aatctcacc agtatagctg gctgttggat ggttttccaa 420
 ggacacttcc acaggcagaa gccctagata gagcttatca gatcgacaca gtgattaacc 480

tgaatgtgcc ctttgaggtc attaaacaac gccttactgc tcgctggatt catcccccca 540
 gtggccgagt ctataacatt gaattcaacc ctcccaaaac tgtgggcatt gatgacctga 600
 ctggggagcc tctcattcag cgtgaggatg ataaaccaga gacggttatc aagagactaa 660
 aggcttatga agaccaaaca aagccagtc tggaaatatta ccagaaaaaa ggggtgctgg 720
 aaacattctt cggacagaaa ccaacaagat ttggcctatg nataatgctt tctacaacta 780
 aagtttcaca aaagaanccc gaaagcttta agttacttcc atgaaggagn aaatgtgtgt 840
 aacttttaat t 851

<210> 3212

<211> 847

<212> DNA

<213> Homo sapiens

<400> 3212

ggcgacactt tgctacggag tgcacggac gtcgaagcct agagtctctg cgtctttccc 60
 tcttcgctg cctcattcct ttccttccta gccttggtcg tcgccgccac catgaacaag 120
 aagaagaaac cgttcctagg gatgcccgcg cccctcggtt acgtgccggg gctgggccgg 180
 ggcgccactg gcttcaccac gcggtcagac attgggcccg cccgtgatgc aaatgacctt 240
 gtggatgatc gccatgcacc cccaggcaag agaaccgttg gggaccagat gaagaaaaat 300
 caggctgctg acgatgacga cgaggatcta aatgacacca attacgatga gtttaatggc 360
 tatgctggga gcctcttctc aagtggaccc tacgagaaag atgatgagga agcagatgct 420
 atctatgcag ccctggataa aaggatggat gaaagaagaa aagaaagacg ggagcaaagg 480
 gagaaagaag aaatagagaa atatcgtatg gaacgcccc aatccaaca gcagttctca 540
 gacctcaaga ggaagtggc agaagtcaca gaagaagagt ggctgagcat ccccgagggtt 600
 ggcgatgcca gaaataaacg tcagcggaac ccacgctatg agaagctgac ccctgttctg 660
 acagtttctt tgccaaacat ttacagaccg gagagaacca taccttaatg gatccccgac 720
 aaactcaatt ttgganggct taacacaccc tattcagggt gactaaacac ttcataacca 780
 agtnggaatg acgccaggac tgatgacacc tggcacaagg ganctggaca ttaagaaaaa 840
 tgncca 847

<210> 3213

<211> 838

<212> DNA

<213> Homo sapiens

<400> 3213

```

ggtcaggatg gacgaggacg tgctaaccac cctgaagatc ctcacatcg gcgagagtgg 60
ggtgggcaag tccagcctgc tcttgaggtt cacagatgat acgtttgatc cagaacttgc 120
agcaacaata ggtgttgact ttaagggtgaa aacaatttca gtggatggaa ataaggctaa 180
acttgcaata tgggatactg ctgggtcaaga gaggtttaga acattaactc ccagctatta 240
tagagggtgca cagggtgtta tattagttta tgatgtcaca agaagagata catttggtta 300
actggataat tggttaaatg aattggaaac atactgtaca agaaatgaca tagtaaaca 360
gctagttgga aataaaatcg ataaggaaaa tcgtgaagtc gatagaaatg aaggcctgaa 420
atttgcacga aagcattcca tgttatttat agaggcaagt gcaaaaacct gtgatgggtg 480
acaatgtgcc tttgaagaac ttgttgaaaa gatcattcag acccctggac tgtgggaaag 540
tgagaaccag aataaaggag tcaaactgtc acacaggga gaaggccaag gaggaggagc 600
ctgtggtggt tattgctctg tggtataaac tctgggaaat tccatctctt gcatatttga 660
tcagatagtg acatctttct gnatataaac tctttaactg ctattttang gaccttgcag 720
tttgcacata attggtttat atcatagcag taaatatttg caagaaatcc ccttatngcc 780
cccgtttaa tggtatggtg agcattgcnc agtttgcagt ctacagtttt ttattgtn 838

```

<210> 3214

<211> 852

<212> DNA

<213> Homo sapiens

<400> 3214

```

gcgtctgcga gaccgacttg gacggagccg agctgaggct cggcttctctg ctgatggtca 60

```

gggttttggc aactccccgg tgtgagaggg gtagggagtg ctcccggcgg cgacggggcc 120
 gagttcacca gccgccgggg cagtagtcga aggcccggcg cggcatgtcc tgggtgccgc 180
 ggtgcgggca gtgaacgcgc gccgggcggg atgggcccgc gccgggcgcc agagctgtac 240
 cgggctccgt tcccgttgta cgcgcttcag gtcgaccca gcactgggct gctcatcgct 300
 gcgggcggag gaggcgccgc caagacaggc ataaagaatg gcgtgcactt tctgcagcta 360
 gagctgatta atgggcgctt gagtgcctcc ttgctgact cccatgacac agagacacgg 420
 gccaccatga acttggcact ggctgggtgac atccttgctg cagggcagga tgccactgt 480
 cagctcctgc gcttcaggc acatcaacag cagggcaaca aggcagagaa ggccggttcc 540
 aaggagcagg ggcctcnaca aaggaaggga gcagccccag cagagaagaa atgtggagcg 600
 gaaaccacgc acgaggggct agaactcagg gtagagaatt tgcaggcggg gcagacagac 660
 tttagctncg atccactgca agaaagttgt gtgcttcaac cagcataata ccctgcttgc 720
 cacttggagg aacagatggc tacgtccgtg tcttgaagg tgcccagcct tgganaaggt 780
 tctggaattc aaaagccac naaaggggaa gattggaaga nccttggctt ttaggggcct 840
 tgatgggcaa ag 852

<210> 3215

<211> 836

<212> DNA

<213> Homo sapiens

<400> 3215

ctaattttcc ttactctttt tgtttgtttg tttcttagtg tggtttattg acaatcattt 60
 acaatgccga agagtgtgt agtgagccag cacagtgggt aacacagcaa cggagaacag 120
 atgcaggttt gaggaattta acttgctaaa accttgaact gaagtcttag agattggaac 180
 atacgggttt gtataaatag gcttttaagc cctgtttgca atgggttact gataggagaa 240
 acttgcttgt ggaatgtcag ctgcgtgagc tactgtcag acaagatgga agaagaaggg 300
 ctggagtgtc caaactcttc ctctgaaaaa cgctattttc ctgaatccct ggattccagc 360
 ggtggggatg aggaagaggt tttggcctgt gaggatttgg aacttaacct ctttgatgga 420
 ttgccatatt catcacgtta ttataaactt ctgaaagaaa gagaagatct tcctatatgg 480

aaagaaaaat actcctttat ggagaacctg cttcaaaatc aaatcgtgat tgtttcagga 540
 gatgctaaat gtggtagag cgctcaggtt cctcagtggg gtgctgaata ttgtctttcc 600
 atccactacc agcacggggg cgtgatatgc acacaggtcc acaagcagac tgttggtccan 660
 ctgcacctgc ggggtggcgga tgaaatggat gttaacattg gtcatgangt tggctacgtg 720
 atccctttcg agaactgctg tccaacgaaa caatcctgag gtattgnact gatgatatgc 780
 tgcaaagaga aatgnggtc caatcctttt ttgggtanct atggggcatc atctta 836

<210> 3216

<211> 839

<212> DNA

<213> Homo sapiens

<400> 3216

aacgctgggc ccggggactg agtaaggtgt ctggatcgga gggaggttcg ggtggggcatc 60
 gggcgggctgg aagagctcga ctctcccg c tgggaaagcg cgagtctgag tggaaccctg 120
 gacgacttgc agagcggctg gcgcagtcac ggaggactac tggaagtcac agccaaagaa 180
 attctgtgat tactgcaagt gctggatagc agacaatagg cctagtgttg aatttcatga 240
 aagaggaaaag aatcataagg aagatgtggc aaaaaggatc agtgagatta aacagaaaag 300
 cctggataag gcaaaggaag aagaaaaggc atcaaaggag tttgctgcaa tggaggcagc 360
 tgccctgaaa gcataccaag aggatttgaa aagacttggc ttagagtcag aaattttgga 420
 gccaagcata acaccagtaa ccagcactat cccacctacc tcgacatcaa atcaacagaa 480
 agaaaagaaa gaaaagaaga aaagaaaaaa agatccttca aagggcagat gggtagaagg 540
 cataacctct gagggttacc attactatta tgatcttacc tcaggagcat ctcagtggga 600
 gaaacctgaa ggatttcaag gagacttaaa aaagacagca gtgaagaccg tttgggtaga 660
 aggtttaagt gaagatgggt ttacctatta ctataatcca gaaacaggag aatncagatg 720
 ggagaaacct gatgattcat tncacacact atgatctgcc ttctagtaag gtcaatgaaa 780
 attcacttgg caccctaag aatccaatca tcagattcgc atagtgattc tgatgggga 839

<210> 3217

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3217

```

aaaatgccaa aatatttta ttttcttaaat actgtcataa attgaattgt tatttacatt 60
tttattttct attctttcac tatatataga aatacaatta atttttgtgt ttgaacatg 120
tattcctgcaa ctttactaaa ttgacttata ttaatccttg taactttttt ctggatttct 180
tagagctttg tacatacaaa atcatgtctg caaataggac agttttactt cttctttcca 240
atttgccttt ttctttttct tgccttattc actatctggg tcttacaata caaatttaaa 300
tgcaaatagt gagagtggat atgcctgctt tgctttgttt gtgatttttag gtagaaaaca 360
ttaaatcttc accattgagt ttgatgttag ctgtagattt tttttataac ctttaattgga 420
tgaggaagac ttctattcct agttgttgag agatttagtg atgaaagagt gttgattttt 480
atcaaatgtt ttttctgcat ccattttaaat aattatatgg ttctttttct gttttctatt 540
catagagtag attatattga ttgattttct gatgttaagc caaccttgca ttctgagata 600
aacccttact ggatattgata gatagtattc tttttacatg ttattgggtc ttattgctat 660
atttngtagg aactttttgt tctatgctca tgagtaatat tgctctgcag ttctattatc 720
ttnggatgta ttggatttc taataaaggc aatggtagcc ccataaaacg atctgggaaa 780
gtccctcct cttttatatt ttggaaacct ttggtgtaag aatggccgctc n 831

```

<210> 3218

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3218

```

ttgttggatc cctagactaa gttgaaatgt atttctaata gtaggcaatt ttaattttca 60
tgtagttgtt taattgttct ctaattaatg gaccaatgaa aaatgagttc atgtgtgtgt 120
gtgtgtgtgt gtgtgtgtgt gtgtattcta ctttttatg ggaaaactac tttttgtt 180

```

taaagatttt cttctgtttt ctttgctaataaagaattgt tattaatttg catgtatgtg 240
 aagtttatat agtctcatgt acattgttat tttcattttc tttcctttat tctgtcatga 300
 gtttttgctg ttacttgcat agttcacttt tttaaaaaat gttatgtttt tagagagggt 360
 ctcactttgt cagctaggct gaagtgtagt ggtaataata gtcttagctc actgcagcct 420
 caaattccctg ggctcaagtg attctcccac cttagcctcc tatgtagctg gagctacaga 480
 cacatgccac catgctcagc taattatata attttaaaaa ttttttatag agatgggatac 540
 tcgctgtatt gtctaggctg gtattgaatt cctggcctca agctatcctc ctgcctcagc 600
 ctgtctacat gttgggggta ctgacatgag ctaccacacc tggcccactt ttactttgaa 660
 ttaagaagag agaactgtga ttggacagta tgcttggcta atctgcgtgt gaaancttca 720
 gctcccacn aagntattgg ggattttcat aaatattctc aacaggctca ggaagtttct 780
 tgggggt 786

<210> 3219

<211> 707

<212> DNA

<213> Homo sapiens

<400> 3219

aagatgatcg taggcgaaga gaagaagttc ctgctgccct tctggctgca ggtgatcttc 60
 atttcgctgc tgctgtgcct gtcgggcatg ttcagcggcc tcaacctggg gctcatggcc 120
 ctggaccgca tggagctgcg catcgtgcag aactgcggca cggagaagga gaagaattac 180
 gccaaagcga tcgagccggt gcgcaggcag ggcaactacc tgctgtgctc actgctgctg 240
 ggcaacgtgc tggtaaacac cacgctcacc atcctgctcg acgacatcgc cggctcgggc 300
 ctcgtggccg tggtagtctc caccatcggt atcgtcgtct tcggagagat cgtgccccag 360
 gccatctgct cccggcatgg cctggctgtg ggggccaaca ccatcttcct caccaagttt 420
 ttcgatgatga tgaccttccc cgcttcctac ccggtcagca agctgctgga ctgcgtcctg 480
 ggccaggaga taggcaccgt ctataaccgg gaaaaactgc tggagatgct ccgggtcacc 540
 gatccctaca acgacctcgt taaggaggag ctgaacatca tccaaggggc gctggagctc 600
 cgcaccaaga cggtgganga cgtgatgacc ccactccggg actgcttcat gatcaccggc 660

gaagccatnc tgacttnaac accatgtctg agatcatggt gaagcgg

707

<210> 3220

<211> 706

<212> DNA

<213> Homo sapiens

<400> 3220

gatgcacttt tggttctatt atgccaccct tttacctggc ttccaaagaa ctgtgggtat 60
 agcagattcc aattataatt ggttttatgg tccagaaagc cagctagttt tcttggataa 120
 gttcatctta aagaatggag ctgaaaattg gttagctcag caaattagaa agcaccgacc 180
 taaagatgga ccgatgggtc cttcaactgc ccaaagggtg agtactcttc aactgaata 240
 catctgggtat gatccccagc tcacaccaca gccacctgct gattatggta ctgcaaaaat 300
 acacacattc cctaactggg gtgtgggttac ttatggggct gggttgccaa acacacagac 360
 caacaccttt gtgtctttta aatctgggaa gctgggggga cgagctgtgt atgacatagt 420
 tcattttcag ccatattcct ggattgatgg gtggagaagt ttttaaccag gacatgagca 480
 tccagatcag aactcattta cttttgcccc caatggacaa gtatttggtt ctgaagctct 540
 ctatggaccc aagttgagcc accttaacaa tgtattggtg tttgctccat caccctcaag 600
 ccagtgtaat aagccctggg aaggtcaact gggagaatgt gcgcagtggc ttaagtggac 660
 tggcnaagan gttggtgatg canctgggga aataatcact ggcttt 706

<210> 3221

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3221

aatatgcttt agatggaact aatgttgcta ttaatatcc aaggctctta cttgacaaaa 60
 ttgagaaaca aatgtttcag ttgcacatag gaaatgttta tgaggctgga aaactgaacc 120

tcttaacagt tattcagtta ttaaataag tcttgaaggt gatgaaatat gaacgttgtc 180
 aggctgatca agcaagattg acggtagacc ttcactacct tgaaaaagag accaaatttc 240
 agaaggaaag attatcagat ctgaaacata tgaggtatag aataaaagat gatctcacia 300
 ctataagaca ttctgttggt gaaaagcaag gagaatggca taaaaagtgg aaagaatttc 360
 ttggtttgtc tcctttcagt ctaattaaag gttggactcc atctgtagat cttttaccac 420
 caatgtctcc ccttttggtt gatcctgcct cagaagaagt gtatgcaaag agtattcttt 480
 gtcagtatcc tgcttcactt ccagatgcac ataagcaaca taaccaagaa aatggttgca 540
 gaggagacag tgataccttg ggagcgctac atgatctagc caacagccct gcctctttct 600
 tgtcgcagtc agtttcatca tcagatagaa acaagtgtta cagtacttga aaaggacaca 660
 aagatgggaa ctnccaaaga aaaaaatgga agcaatttct aagaaaatac cnngaatttg 720
 gaagtgggaa aaattcttcc attt 744

<210> 3222

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3222

attttatcaa ttgtaatgg ctaacaaact tggatagcaa gtactagaag attttatgat 60
 tattcaggga catattttct agcactgaat atgtgccaga cattgtccta ggtgctagag 120
 ctatagtgat aaacaaatca gatgaaagta gaaatccatg ccctaaagaa cttaatgttt 180
 caattgggaa ggtcaagtca gatagggtta aaggcaaaca cagtagcact gtagacatta 240
 ctatataagc tttatggcaa ctagtggttg tgcagtgctt tacagttagt aaacagtgtt 300
 cacgtacctt atctcacagt ggctttgttg gtttgacaaa gtagcaatcc tcatttcata 360
 ggtgaggaaa ctagggctct ttaagattag ataatctgtc taatagcatc cagccagggtg 420
 gtcatctgac tctaaatcct ttgaagtctt acttatgcta cagtgccttt ctttttccta 480
 cagatattgt taggcataat tcatcatcta gcaagtccag aatcatcttt ccagagttcc 540
 agctcattca taataacatg tticagaaat cagggtcctg tattagttac gtttttctta 600
 aatggagacg gaatcaaatg tgactgcatg tagtttttct ggtctcattt ggcctatttt 660

ccaagagtaa gggtagtaga tggctatttg gagcagtaac tggacagcat ctgtccagtg 720
 ggacagctgg agacttggct ttagtatttg ggaatgctga cttatgggct gcttaatcnt 780
 ttggagtctt gaanggangg atta 804

<210> 3223

<211> 704

<212> DNA

<213> Homo sapiens

<400> 3223

agccggggat tgccggcgcc aggtgctggg ggcgactcgg acagcgggag cgtgggggtgg 60
 agtaggatgg agtctccctc ccgagctggg ggtgtgggcc taggaaaggc tgcttcgccg 120
 ctgtgttcgg agagctctgg atactgcggg gcttttcgc ggaggagcgc ccgccggcat 180
 ctgcatctgg gaccgacctc ctgggctggc tgatcaaaga ggaagcagca gcaatgtctg 240
 ctgtgggggc tgcaactcca tacctgcatc atcctggtga tagtcacagt ggccgagtga 300
 gtttcttggg ggcccagctt cctccagagg tggcagcaat ggcccggcta ctaggggacc 360
 tagacaggag cacgttcaga aagtgtctga agtttgtgt cagcagcctg cagggggagg 420
 actgccgaga ggctgtgcag cgtcttgggg tcagcgccaa cctgccggag gagcagctgg 480
 gtgccctgct ggcaggcatg cacacactgc tccagcaggc cctccgtctg cccccacca 540
 gcctgaagcc tgacacctc agggaccagc ttcaggagct ctgcatcccc caagacctgg 600
 tcggggactt ggccancgtg gtatttggga gccagcgcc cttcttgatt ctgtggccca 660
 acagcanggg gcctgcttgc cncatgttgc tgactttcgg tggc 704

<210> 3224

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3224

actcagtgc gagggaaatt gacacagcca tgatgaggcc tggctcacia gagccatagt 60
 tactgttaga gtttctgtgg ctaaatatgc ttagctattg aggcaaggac atgtgctgga 120
 tgtgtatgca gtctttgaag ctggagaggc ctgtgttgga aactgtgctc tgtcccatgc 180
 cagttccctg accttgaac ccctagagca atcaacagac agacagagcc ctgcttcatg 240
 gagcgtctgc tctctcctgg agctcacacg ctgaaacaga caggatgcaa cacctcaggg 300
 ttgttgga accagaggct gttgcaatta ggatggcgaa tggtgaaaaa cagtgtggtt 360
 gaattgaaca taagctgaag ggctagacat catggcttca atccttgtgg aggagccttc 420
 atctaccaca taagaattgc agcaaaccct gcagctatcc tgaagctgcc atgctgaaaa 480
 ggccaattgg gagaccacat agagaccgag agagacttcc aaggactcca gccaatcctg 540
 ggccccagca gtttgaatct cccagcaatg ccaccataca ggagagggag caaatctcag 600
 aagattcaag tgccactgca tgggttgata cctacataaa aggcatgtgg tatgtgctct 660
 tgggtgattc cctaatacata gtggaaagat gggagctgan actntaagac tggaagtact 720
 tggccaaact tatggcttga tacggatctt ttaacttaaa atcgngggtc ttct 774

<210> 3225

<211> 644

<212> DNA

<213> Homo sapiens

<400> 3225

tgaccagcga ctgagcggcg gccggcgcg ttagcgccct gaacatgcgg cagtcctctgc 60
 gggcgacccc gggctccgga caggcggcg cggagggcg ggctcgggag ggaaggaggc 120
 ggcgggcgccg gcggagggtg cgngggagac ggccggcgcc cggcgcggag ccctagggag 180
 gcagttcagc gcggcctcgg gcctngtcga gaaggatgct gtcccgaaag aaaacaaaaa 240
 acgaagtgtc caagccggcc gaggtgcang ggaagtacgt gaagaaggag acgtctcttc 300
 tgcttcggaa tcttatgcct tcattcatcc ggcatggtcc aacaattcca agacgaactg 360
 atatctgtnt tccanattca agccctaatt ctttttaac ttctggagat gtagtttcaa 420
 gaaaccagag tttccttaga actccaattc aaagaacacc tcatgaaata atgagangag 480
 aaagcaacag attatctgca ctttcttatt ttgccagaag tctagcagat gtccttagag 540

agtatggntc ttctcagtca ttgtgaacgg aagttagttt tgctgttgaa aatggagact 600
cttggttncc cgatattatt attcanacaa ttttttttga tggt 644

<210> 3226

<211> 645

<212> DNA

<213> Homo sapiens

<400> 3226

ttttgcattc ctccagcttg cagctccggt agttggaggc tgggtagggc agggggaacc 60
gacaggccgg tgtccccagc cgcaaaagag ctgctgaact gtccgtttaa atgctgctgg 120
gagactcgta aaaaaatcat cgtggacctg gaggatgaga ggggcgagct ttatttcggt 180
cggattgcgg tgtggtggtt tagctgcaag gggatgccgc agccccagtt gagggggaaa 240
atagttctta aaaagcatat gccccctaa ggaatgtctc taaagaacca aatcaaagct 300
gctcttttga aggtatgaat agaattttaa aaaaaagat ttctatggag cttaaagttc 360
acagccattc tgtgtagaca agagctgana aaaatgtgag aattatacan aaaaccatta 420
atcacttctt ttctttaaat acgtatcctc tctcctttgt tattattcaa cagcaaattc 480
ccttggaccg gctgttgggg gaaaaaagtg ttagccgtct ctcccggatc tgcaaggggg 540
aaaaaatttg gaaccataaa gttgaaaact tttttctctc agtttggaag aagcccttcg 600
tcatgaatgg gatctgcaga gttcgggcga naggangcga naggc 645

<210> 3227

<211> 865

<212> DNA

<213> Homo sapiens

<400> 3227

tgtgattttt atctttattt agctcagact agcttattcg gtcagtgaga gggagcctct 60
tcagcttggc tcttgctttc ttttgataag tgtgcacatg tgtgcataca tgtgtgcaca 120

gaccacacgc acagtcattg atagctccct gcagcctggc atgtcaagat gctctaggcc 180
 caatttatag agcttctgct ccaaacctgt cttaaaagaa aaactttaga caagtttagca 240
 gtttaattga gcagaaaata gtttcttcag ctgggtagca ctcaggacca aaagtgggtc 300
 agaacgttct cctgtgcgtt gtgtgcaggc tgtatttatt tatagccaca ggaagggaaa 360
 gacacatgta catggccaga ctgactgcag gtcagcctcc acctcacata ggcatgtttt 420
 gggagccttc agcatgtgat tggtagagact ctgctgcttg ttacagaagt gtactctcaa 480
 gtcagggtccc agtttgctta tacattaagt gaggttataa gtcactatgt acagaggcag 540
 ttttaggcca aacttaattc cgtttaacac ttggaatcca ttatttttcc cagagtctct 600
 ggtagagatg gtatttcaga tccagtttag gatgctcatt gctattgcgt tggtcattat 660
 ttctagatct ttggacggag ctttaaaaaa atacaaacat tgcacacaca tatttaaagg 720
 aagaatattt tctgagccta tattgatatt cccaatacaa attcaaggtc ctggggcctt 780
 tacatagccc tcctctatat gaaggcctgg gncnctggc acttcggaat ncctgctttt 840
 tcaagacaca ggaccaatgg catgg 865

<210> 3228

<211> 859

<212> DNA

<213> Homo sapiens

<400> 3228

taattttaaa gccagtccca gcagatcaaa tgatagtttc tccgtcaagc aatacttcca 60
 cttcaacttc cactcttcag agccctgtgg gagctggcac acacactgtc acaaaaattc 120
 agtctggcat aactgggaca gtcatatcgg ctcttcaag cactcccatc accccagcca 180
 tgcccctaga tgaagacccc tccaaactgt gtagacatag tctaaaatgt ttggagtgt 240
 atgaagtctt ccaggacgag acatcactgg ctacacattt ccagcaggct gcagatacga 300
 gtggacaaaa gacttgact atctgccaga tgctgcttcc taaccagtgc agttatgcat 360
 cacaccagag aatccatcag cacaaatctc cctacacctg ccctgagtgt ggggccatct 420
 gcaggctcggg gcacttccag acccagctca ccaagaactg tctgcactac acgaggagag 480
 ttggttttcg atgtgtgcat tgcaatgttg tgtactctga tgtggctgct ctgaagtctc 540

acattcaagg ttctcactgt gaagtcttct acaagtgtcc tatttgteca atggcgttta 600
 agtctgcccc aagcacacat tcccacgcct acacacagca tcctggcatc aagataggag 660
 aaccaaaaat aatatataag tgttccatgt gcgacactgt gttcacccctg caaaccttgc 720
 tgnatcgcca ctttgaccaa cacattgnaa accagaaggt gtctggtttc aagtgtccag 780
 actggctctt ttatatgccc agaagcactt atgatggacc atatcaagtc tatgcatngn 840
 acatttgaaa agtnttgaa 859

<210> 3229

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3229

nttctgggag caagcctgca gcccggtca cctggagaaa gggtagacca gaactccacg 60
 gagaaccaac ccgcatacag gaagatccca atggtaaaac cttcactgtc agcagctcgg 120
 tgacattcca ggttaccggg gaggatgatg gggcgagcat cgtgtgctct gtgaaccatg 180
 aatctctaaa gggagctgac agatccacct ctcaacgcat tgaagtttta tacacaccaa 240
 ctgcgatgat taggccagac cctccccatc ctcgtgaggg ccagaagctg ttgctacact 300
 gtgagggtcg cggcaatcca gtccccagc agtacctatg ggagaaggag ggcagtgtgc 360
 caccctgaa gatgaccag gagagtgcc tgatcttccc tttcctcaac aagagtgaca 420
 gtggcaccta cggctgcaca gccaccagca acatgggcag ctacaaggcc tactacacc 480
 tcaatgttaa tgacccagc cgggtgccct cctcctccag cacctaccac gccatcatcg 540
 gtgggatcgt ggctttcatt gtcttccctgc tgctcatcat gctcatcttc ctcggccact 600
 acttgatccg gcacaaagga acctacctga cacatgaggc aaaaggctcc gacgatgctt 660
 cagacgcgga cacgggcatc atcaatgcag aaggcgggca gtcaggaagg gacgacaaga 720
 aggaatattt catctagagg cgcctgccac tttctgcgcc cccaagggcc ctgtggggac 780
 tgctggggcc cgtaccaacc cggacttgtn canggangca 820

<210> 3230

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3230

```
tacaggctct gtgctgattg caaggcactc ttgagagaaa ttcattctta ttttgcagaa 60
gaagaactga aacttcatta agtcattaag caacttgctc aggtgggtga actgagcttt 120
aaatatggac tttttccagt ctcaattcag cattatacta ggctgcctcc atgtgttttt 180
caaagcccca ttcaagtttt acttctatgg taaactaatt ttacatacac aaatcttttc 240
atthttctgaa cttcctttat ggctttactg tcacccact agtatttgat gtcttagcta 300
ttaactaatt cctgattatt tcacttgta catcaggaac cctatcctct tagttctccc 360
attgagattt cactgctgga ctaagattat tcttgattcg tagtcattgg tttctgtttc 420
cattcatttt cagcactgat tatgttaatc gtattgcttg agttttttct ttgttcaatg 480
ttgtttatta cattcatttt gtttcatata cacacatttt ttttttttaa ctggcatttt 540
gaggacattg gtttaatgga aggaaaaagg aatgggtgcaa agcacatggt atttgaattc 600
caaagacctt gaccctcagc attagcaagt cacttgtttt ctgagcctca gttttcttac 660
tctcaaataa ggtaatatcc gaaagtcttt gacaacacac taaagcctga tgcagatttc 720
ctttttgaag taattgggct ggttctattc atattggata tggnattcta tggattggc 780
tatagatnct acattttaaa atgtatttaa cagcatgtaa atgtcattca tgcctgtgac 840
atgttccctt tatgaatttt 860
```

<210> 3231

<211> 886

<212> DNA

<213> Homo sapiens

<400> 3231

```
atgatttaca tttcaagatt tcagttacat tttttaagga attcaacaat tctgcatcat 60
gaagtattct ttcacacaaa tgttccatag tcattagttt ttacagaacc cttttcttat 120
```

attctgcatt tcacttgaa tactataagc acaagttcag tttggcattc tgttctccac 180
 tagtgattga gtttgaagcc caaggtcagg atattgattg atgacatttc cctttaaagt 240
 atttgtatcc atttgaatt tggggacaga gtgattccca gtatggtgca ggaaataact 300
 aaactggaag tcagcctgac tcagttttgt agttaatttt ctttgtgacc ttgggcatgt 360
 cacttaacct tccaataact gagggagttg gcccagaact agcacagtct tctaatacag 420
 acattccacg attctctagg gaggattcac ttccatagag gttttaaagt ggatacattt 480
 ttaggttaaa tggctttgtt catttagttt ttttctcctt aaccattttt ggagcaataa 540
 gactgtcatg gagtaaaacc aaattacctg gaactctcaa aaggctgcag ttcttctcct 600
 atttttttta tttttaaggg aagggaataa aatggcaaca aacaaattta tatccatgag 660
 tcaggacaaa tccatcccag ttttctaaca tacacagtgt cataaacata ttcaatgaag 720
 cactgcagat tcttaaccg aaaatggaat atttgggttg gacttaccat tcctaaaatg 780
 gtgggaaaga actggncttt ggaaatatac ctttttgag tanttttttag ccaaaaaatt 840
 ggtttttaaag ccagttggcc ttgggttttg ccaagggacc ttgtgn 886

<210> 3232

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3232

aaatgaaacc agaccagat caatatatta ggatactaga tgttttaatg gggtcagaat 60
 ccagtttgta ggaagatttt ttaatggttt tgggtgctcc tccccagct gccaccccc 120
 acctaccct tttctctc tgctccacatt ttctgcccc cttacttct cctccctgac 180
 agacatccag cccctagtaa tacttaaggc actatggcac ttagctttga agtgacacta 240
 cctgtcttc cttccgccg ctgggtggta accagtgcct tccctgtaac ggtaatgctg 300
 cagaactgca accttttgta cttttctttg gggaatgggg tgggggtggg agaggaggta 360
 gatggggaag aaatacccca gaccaacaa acctccagcc agaaagccag ctattttgca 420
 tttgaaggaa ttgacttcct cattcattga gcttttttaa agatcacacac ctcaagatgg 480
 ttaaaatcca ttgacatttg cactttcaaa catgacaagt ctcggagctg ctganatgac 540

aggcccctgg cctttccact tatgcctnct tttctcctta ttcctnctac ctcgccccg 599

<210> 3233

<211> 868

<212> DNA

<213> Homo sapiens

<400> 3233

aggaacgaca atcgagtggg tagaaccaaa gatatcttta tcaaaccact ataaaaatgg 60
 agctgaccag ccctttgcaa ctgatcagag taagccgggtg gcagtcccag aagagcagcc 120
 tgttgacaaa tctggactat tagcgaggga gcctaaagaa ataaatgcag atgatgagat 180
 agaggataca tgtgaccaca aagaggatga cctgggagct gtagaagaac aacgtagtgt 240
 catcctacat ctcttgtcac agcttaagct gggcatggat ttaacaagag tgggtgcttcc 300
 tacatttata ctagagaagc gttccttgct ggaaatgtat gcagacttta tgtctcatcc 360
 agacctatct atagccatca ctaatggagc cacagctgag gacagaatga ttcgctttgt 420
 tgagtactac cttacctcat ttcattgaagg ccgtaaggga gccattgcta aaaaaccata 480
 caatcctatc attggagaaa catttcactg ttcctggaag atgccaaaaa gcgaggtagc 540
 atccagtgtt ttttagcagtt ctccaccca gggagtcaca aatcatgctc ctttatcggg 600
 ggagtctttg acccaggtgg gatcagactg ttacacagtc agatttggtg ctgagcaggt 660
 ttctcatcat cctccagtct caggatttta tgcagaatgt acagagagga agatgtgtgt 720
 aaatgcgcat gtctggacta agagcaagtt cttangcatg tcaataggcg tgacaatggt 780
 tggagaaggt atccttagtc tgttgagca tggagaagag tccccatttt ctntaccct 840
 ggggcatatg ctcggcaaat ttgctgnt 868

<210> 3234

<211> 867

<212> DNA

<213> Homo sapiens

<400> 3234

```

aaatgatgtt aaagtaagaa ttgcactcct gtccctctgg ccttccatct ctcccgcctt 60
tgtgccccac aacctggcca acagtactgg aagaaactgg acacagtcac cagcatcccc 120
ggggagggca aaacagccat gtcgtgccct gatgaagagc aattctgata acagctgtta 180
ctcactgagc accagccagg caccaggcac ccataacac ggcttccctgt gctctccctc 240
cagagcctgt cgcagctcta ggaggagagc atacaatgat gtctttatta gtgtcatcat 300
gagaagccca ataagcagta tgccctaaca gttagtaggc caggctctgg agctaagctg 360
catgggttca aatcccagct ccaccattca gcctgcagag accatgagcg agttacttaa 420
gccaggctct ggagctaagc tgcattgggtt caaatcccag ctccagcatt cagcctacag 480
agaccatggg tgagttactt aagccaggct ctggagctaa gctgcatggg ttcaaatccc 540
agctccacca ttcagcctgc agagactgtg ggtgagttac ttgagctctc tgtgccaata 600
ttttctcacc tataaggtgg aggtgaaaat aaactctata acatgacaag aactacttca 660
cagtagttgc agtgaggatt caacgagatg aacatttagt acttgggaca cagcagtggc 720
ccaatgtaaa tgggctactt gtcataagcc ctaagtcaca ggtcaacaaa ctgagangca 780
aaaagccctt ggggtgagct tgggtatcta gtgagtatgg attcanggac cagattccag 840
cccacgaact ggtaacaanc ccacctt 867

```

<210> 3235

<211> 839

<212> DNA

<213> Homo sapiens

<400> 3235

```

gctctgctgc ggaggccgta gccgcgggta gttgggagga accgagattt acgcttggtta 60
aggcaagttg cgagctgtcc ggcgccggtc gatttccctgc cgccgtcgtc gtcaggcagg 120
ggagaagggg gccaacccc tctagtgaac gctgtttgct acctaataagg gcttttcata 180
ccaccggggc ccagggcctt cgttaggagc ccagcaggct caacttcttg ctgtggttct 240
ggaaaaggga gtgaccacct ggctcaacac ctctctctgt gatgtgtttg ggagtttttg 300
gaaatgagac ggctccgagg gaagagcttg agggagcggc gtcgcactcg ttcgaccttc 360

```

ccgggcctgg gctttgtttc taggcatttt aggttgaacg ctctacatct taactgaggg 420
 caggggaggt ggccagagca tcccgtgag cgttttccga ttccccagat ggccaggcac 480
 ctggtcctgg tggctggaca gtgaccccggt ggacgcacat ttacagctat agccattcag 540
 tgccgcgggg aggtgaggat agtgatcctg ggacctgctc gaggattcac ccttgcccca 600
 agaacctgtt ccattcccag gaatgaaggc ggtcaggcag gggaggagaa gggggcctca 660
 actcttctag tgacagcagt ttgccaccta atagagcttt tcagattttg tcttctcang 720
 ccattttact cagcctcgga ctatcaaagg atggtcacat ttgaaactgg ttttctgcan 780
 tcaggaacca aaaagtnccg gcttgttgaa ggaagaaact tgaatcttgg ntcaggagt 839

<210> 3236

<211> 864

<212> DNA

<213> Homo sapiens

<400> 3236

agcgcgggga atttcgagtg gtgttggagc gccggaggct agtgggtggc tgacccccag 60
 catcctcgag agcgaccatg gactccctgg ccgagtctcg gtggcctccg ggcctggcag 120
 tcatgaagac aatagatgat ttgctgcggt gtggaatttg cttcgagtat ttcaacattg 180
 caatgataat acctcagtgt tcacataact actgctctct ctgtataaga aaatttctgt 240
 cctataaaac tcagtgtcca acttgctgtg tgactgtcac agagccggat ctgaaaaata 300
 accgcatatt agatgaactg gtaaaaagct tgaattttgc acggaatcat ctgctgcagt 360
 ttgctttaga gtcaccagcc aaatctcctg cttcttcctc ttcaaagaat cttgctgtca 420
 aagtatatac tcctgtagcc tccagacagt ctttaaagca ggggagcagg ttaatggata 480
 atttcttgat cagagaaatg agtggttcta catcagagtt gttgataaaa gaaaataaaa 540
 gcaaattcag ccctcaaaaa gaggcgagcc ctgctgcaaa gaccaaagag acacgttctg 600
 tagaagagat cgctccagat ccctcagagg ctaagcgtcc tgagccaccc tcgacatcca 660
 ctttgaaaca agttactaaa gtggattgtc tgtttgcggg gttaacattc cagaaagtca 720
 cattaataag catttagaca gtggttatca cgccaagaga agaaggaaag ccttagaagt 780
 tctgtcaciaa aaggaaccgc tgcccaaaac tgnatataat ttgctctctg atcgtgattt 840

aaagnaaaaa gcttaaagga cctg

864

<210> 3237

<211> 811

<212> DNA

<213> Homo sapiens

<400> 3237

```

accagcgcca tgctgggctc gcgagccgcg gggttcgcg ggggcctgcg ggctttggca 60
ctggcgtagc tgccgggctg gcggggcccgc tccttcgccc tggcgcgtagc ggcaggcgcg 120
ccccacggtg gtgacttgca gccccccgcc tgtcccagagc cgcgcgggcg ccagctcagt 180
ttgtccgcgg cggcggtggt ggactctgcg ccccgcccc tgcagccgta cttgcgcctc 240
atgcggttgg acaagcccat tggtagtagc gggcgggcg ggcagccggg aatttgcaag 300
tagcagccgc cgagtcggct ccgaggagct gtccgcggcg gccggccggg gcgtgatgga 360
aatgagaacc tgaaagcttg ggcttggctg ccgggtgccg tgcgccctgg ggcgaatcac 420
ctcgggacac tttgaaatga gagcctgaaa gcttgagctt ggctgccggc tgccgtgcgc 480
cctggggcga gtcacctcag gacacgcagt cgggacagtc tcctaaagga cccgccagtt 540
tcacgtctgt ctgcatcctg agcacctgaa gcgggcaaga taattctcat tccacaaaca 600
cttgttttaa tggtagtca agcggaaggt tccgttctcg tggccctcct tcatttatta 660
gaatgtttga ttcttcccgc aatcttgtaa ggcccacaaa gacaatcctt aagacagtta 720
agacgcttgg ggaaactaag gtctctgta gagccnngac cngaagaact tttgggtttt 780
gatgctgaat tcggactctt ttaccctgca t 811

```

<210> 3238

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3238

gatgaagatg atgaatctga tgacagccaa tcagaatcag atagtaattc agaatcagat 60
 acagaaggat cagaagaaga agatgatgat gataaagacc aagatgaatc agatagtgat 120
 actgaaggag agaaaacttc aatgaaactg aataaaacaa cttcctctgt caaaagccct 180
 tccatgagtc tcacaggcca ctcaacacct cgtaacctcc acatagcaaa agccccaggc 240
 tctgctcctg ctgccttatg ttctgaatcc cagtcacctg cttttcttgg tacatcttct 300
 tccacactta cttcaagccc acactctggc acttccaaaa gaagaagagt aacagatgaa 360
 cgtgaactgc gtattccatt ggaatatggc tggcagagag agacaagaat aagaaacttt 420
 ggagggcgcc ttcaaggaga agtagcatat tatgctccat gtggaaagaa acttaggcag 480
 taccctgaag taataaaggg aatgcagtgg tgtcttttga aagaagagga tgtcattcct 540
 cgtatcaggg caatggaagg tcgtagagga agaccaccaa atccagatag acaacgagca 600
 agagaggaat ccaggatgag acgtcggaag ggtcgacctc caaatgttgg caatgctgaa 660
 ttccatagata acgcagatgc aaagttgctt anaaaactgg cagctnaaga aatagccngg 720
 caagcagcac aaataaagct tttagaaaaa cttcaaaagc aggaacaggc tcgggttgct 780
 aaagaagcca aanaacaaca gcaataatgg ctgctganga gaagcggaag ccaaaagaac 840
 nggttaagga tatgaac 857

<210> 3239

<211> 864

<212> DNA

<213> Homo sapiens

<400> 3239

gacgggccgt ctcgagagcc ggcattctct aggagctagt cctggctctc ggctaggcgg 60
 cttgggggtcg cggcgtaact ggggagccag cctgacgccg gcggaccccg cctgtgatcc 120
 tggcaacgat ggatgatgac ttgatgttgg cactgcggct tcaggaggag tggaaacttgc 180
 aggaggcgga gcgcgatcat gccaggagt ccctgtcgct agtggacgcg tcgtgggagt 240
 tgggtggacc cacaccggac ttgcaggcac tgtttgttca gtttaacgac caattcttct 300
 ggggccagct ggaggccgtc gaggtgaagt ggagcgtgcg aatgaccctg tgtgctggga 360
 tatgcagcta tgaagggaag ggtggaatgt gttccatccg tctcagcgaa ccccttttga 420

agttgaggcc aagaaaggat cttgtagaga ccctcctgca tgaaatgata catgcctatt 480
 tatttgtcac taataacgac aaagaccgag aagggcattg tccagaattt tgtaaacata 540
 tgcacgcac caacagcctg actggagcca atataacggt ataccatact tttcacgatg 600
 aggtggatga gtatcggcga cactgggtggc gctgcaatgg gccgtgccag cacaggccac 660
 cgtattacgg ctatgtcaaa cgagctacta acagggaacc ctctgctcat gactatttgt 720
 gggctgagca ccagaaaacc tgtggaggca cttacataaa aatcaaggaa ccagagaatt 780
 ctcaaaaaaa ngcaaaggaa aggcaaaact nggaaaggaa ccatattggc cgcagagaat 840
 taaggataac ccaacagagg tgag 864

<210> 3240

<211> 559

<212> DNA

<213> Homo sapiens

<400> 3240

atgacactct gagcgctccg ggaacggaca gcccggcggc ttcccgaagc cggcggcgca 60
 gctgcccggg gcgaggggga gaaagggaga gagggagggg gagggcgggc gaagcgggag 120
 agccagagac tcctcggcgc tgagcgcggc ggcggcccgg gcagccccac gcccctgcct 180
 cgcgcgccgc ccgcgccatg aagcacatcc cggtcctcga ggacgggccg tggaagaccg 240
 tgtgcgtgaa ggagctgaac ggccttaaga agctcaagcg gaaaggcaag gagccggcgc 300
 ggcgcgcgaa cggctataaa actttccgac tggacttggg agcggccgag ccccgccg 360
 tagccaccaa cgggctgcgg gacaggacc atcggctgca gccgggtccc gtaccgggtgc 420
 cgggtgccagt cccagtggcg ccggccgttc cccaagagg gggcacggac acagccgggg 480
 agcgcggggg ctctcgggcg cccgaggtct ccgacgcgcg gaaacgctgn ttcgncctag 540
 gcgcantggg gccaggact 559

<210> 3241

<211> 871

<212> DNA

<213> Homo sapiens

<400> 3241

```
ccttggccaa gaagttgcc aaccaccgg gcagccccct gggccactca ccaactgcct 60
ctcctcctcc tacggcccga aagatgttcc caggcctggc tgcacctcc ttgcccaaga 120
agctgaagcc tgaacaaata cgggtggaga tcaagcggga gatgctgccg ggggcccttc 180
atggggaact gcacccatct gagggtcctt ggggggcacc acgggaagac atgacacccc 240
tgaacctgtc gtcccgggca gagccggtgc gcgacatccg ctgtgagttc tgcggcgagt 300
tcttcgagaa ccgcaagggc ctgtcgagtc acgcgcgctc acacctgcgg cagatgggtg 360
tgaccgagtg gtccgtcaat ggttcgccc tgcacacact gcgagagatc ctcaagaaga 420
agtccaagcc gtgcctcatc aagaaggagc caccggctgg agacctggcc cctgccctgg 480
ctgaggacgg gcctcccacc gtggcccctg ggcccgtgca gtccccactg ccgctgtcgc 540
ccctggctgg ccggccaggc aaaccagggt caggggccggc ccaggttcct cgtgagctca 600
gcctgacgcc catcactggg gccaaagcct cagccactgg ctacctgggc tcagtggcag 660
ccaagcggcc cctgcaggag gaccggcttc ttccagcaga ngtcaaggcc aagacctaca 720
ttcagacttg aactggcctt tnaagggcaa agaacccttt cattgaagaa agacccttcc 780
aacttccttc caaccgaagg ccctggcttg caaaacttgt ggtngggccc ttttactttt 840
ggaaaaaccc gcnaagggnc cttgggccaa g 871
```

<210> 3242

<211> 811

<212> DNA

<213> Homo sapiens

<400> 3242

```
atgctattga agacagcaga caggccccga ctgagaccgt ggttgatgac tgggacgaag 60
agtttgaccg agggaaggaa aagaaaatta aaaaatttaa gagagagaag aggagaaact 120
tcaacgcctt ccagaaactt cagactcgac ggaacttctg gtctgtgact caccagcaa 180
aggctgccag cctcagctat cgccgctgac tgtgcccctg tggaaggagg actaccgtgg 240
```

tttgttctgc agcctcctgg agacaaggcg tcccttcccg ggagctgtcg gtctggatct 300
 gagggagctc tctgtgtggg ctctgctgtg ctgggagcct gtcacggtag gagctctccc 360
 ggtaccagtg tccacagacc gcccaacata gaggctttga ggcttctcta gatcggaacc 420
 tctttggtga cattcccgac cagccctgca agagaaacga cagtgtgtgt gtgagcagag 480
 gtggctgcac acctgctgga catctttgcc aggctgtgcc ttctcatgtt tcatagacag 540
 tggctctgtc tggcagaggg tgctgcccct gggtggggct atcaggagag tgggggatgg 600
 tggccacatg tcctccaggt ggtctcccgg tgcatactgt gtggctctgg gcaagccatc 660
 ccttgcttct cggggctgac gccaccgttg tgtccgagcc cgcctccctg cttcctnacc 720
 ggaccccttc atctggtggc cttacctgtc ctcaaaaagg aaaagtgacc ccaccagcc 780
 accttncct tttatggaac tcnaaagggtg g 811

<210> 3243

<211> 806

<212> DNA

<213> Homo sapiens

<400> 3243

catcaaaata tgaagtcctg acagttcaag agcctccaag gattgaagat gccgaggaat 60
 ttcccaacct ggcagttgca tctgaaagaa gagacagaat agagacaccg aaatttcaat 120
 ctaagcagca gccacaggat aattttaaaa ataatgtaaa gaagagccag cttccagtgc 180
 agttggactt ggggggcatg ctgacagccc tggagaagaa gcagcactct cagcatgcaa 240
 agcagtcctc caaaccagtg gtagtctcag ttggagcagt gccagtcctt tccaaagaat 300
 gtgcatcagg ggagagaggg cgccgcatga gtcaaatgaa gaccccgac aatcccttgg 360
 actccagcgc cccactgatg aagaaaggga agcagaggga gatccccaag gccaagaagc 420
 caacctcact gaagaagatt attttgaaag aacggcaaga gagaaagcag cgtctccaag 480
 aaaatgctgt gagtccagct tttaccagtg atgacacaca agatggagag agtggtggtg 540
 atgaccagtt tcccgagcag gcagagctgt cagggccaga ggggatggac gaactgatct 600
 ccactccttc ggttgaggac aagtctgaag agccaccagg cacagagctc cagagggaca 660
 cagaggcctt ccaccttgct cccaatcaca ccaccttctt aagatccaca gccgcagatt 720

cagggattct gcagccagat gcttagtnaa gaaatggatg cttgggtacc cgcctactca 780
aagaactggt ccgntttcaa gancgt 806

<210> 3244

<211> 796

<212> DNA

<213> Homo sapiens

<400> 3244

aaatgctcgg tgctttaaat ttgcaattac catatttgca gaaacttgaa aaatcatccc 60
aattaaatga caaaatgtat aggaggatta tctttctttt gcccttaca ctcaaattat 120
attcgaagta acatttttac agcagtcaaa acttttaacc aaaactcaca cctgcagtct 180
cataagttta acaaaatggc cacattccac gctttatttt cttacaacc ctgactgttt 240
aaatgactcc cattgaacca acagcttaca gttgctgggc aataaaaaag cgagcaaaag 300
gacctccagc cctgctgttt tagctattac ccagcactct cagagtttgc tctagtctgg 360
ctgttcaatc aaattcattt tccagtagct tctggccttt gtctcctctt tctggccacg 420
catttcattg cctcctgaat ttgatgacaa cattttcttt cttactttg aatcttggcc 480
cagaatctca ctctcccagc cccatggaaa gatggggaaa agatttcatt ctgctgatca 540
aatttgtag aagacattct ttagagtctg aaaaaatata tttcattagc agttctctag 600
gtagtggaaat ttttagtgat gtttactctt ttttccttgt tctaattttc ctctaataaa 660
cagaaaaaaa gcaagagtaa cccaccaaat ttggataaag ggcttctgct tttcatattc 720
tcttcaacca gaacagctta acttttctcc atttatttat ttaagtattt attcatattt 780
gaaaacaagg nnnttg 796

<210> 3245

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3245

```
gtggccccctg agtgctgggt gggaccgcgg tgactgaacc tagaagggtg agaggaatcg 60
tcctcgggtgc ccagaggcgg ctctgcagcc ccgtgacggc gaccactgct cccggggccgt 120
gcttccccaa gtagtccgat ggcagcggct gtgccgaggc gcccaactca gcagggcact 180
gtgacctttg aagatgtggc tgtgaacttt tcccaggagg agtgggtgtct tcttagtgag 240
gctcagaggt gcttgtaccg tgatgtgatg ctagagaacc tggctctcat atcctcgtg 300
ggttggttgg gtggatcaaa agatgaggag gcaccttgta agcagagaat ttctgtacaa 360
agagagtctc agagcaggac tcctagggca ggtgtttctc ctaagaaggc tcaccctgt 420
gaaatgtgtg gcctcatctt ggaggatgtt tttcactttg ctgaccacca ggaaactcat 480
cacaagcaga agctgaacag gagtggagca tgtggaaaaa acttggtatga cactgcatac 540
cttcatcagc accagaagca gcatattgga gagaaattct acagaaagag tgtcagagaa 600
gcatcgtttg taaagaaacg taagctcaag gtgtcacagg agccatttgt cttncgcgag 660
tttgggaang acgttctgcc cagttcanga ttgtgccaag aagaagctgc tgta 714
```

<210> 3246

<211> 763

<212> DNA

<213> Homo sapiens

<400> 3246

```
ntgaagcaat gtgggttaaa gttagaccct ggggaaacct tgcaggggtc tgtangcctg 60
tgaagaactg gactaggtga gaagaagaag cttttgacct atgtcactcc ctggcccaga 120
actatatacct acccacaggt gggttgagtt caggactgct gcttccagcc cccagcagca 180
aggttcaagt gagagctgac tcacctaggg ccccttgta gagcctnaga gccaggtgaa 240
aagccacaca caggctgggc gcgatggctc acgcctgtaa tcccagcact ttgggaggcc 300
gaggcagggt gatcacctga ggtcaggagt tcaagacat cctggccaac atggcaaaat 360
cccgtctcta ctaaaaatac ataaattagt cctgcctggt ggcacatgcc ttagtccca 420
gctactcggg aggctgaggc aggagaatcg cttgaaccgc ggaggcggag gctgcagtga 480
gccgagatcn tgccactgca ctccagcctg ggtgacagag cgggactctg tctccaaaaa 540
```

aagaaaagcc acacaggtgt gtgtgtaggg gcaagggagt ttcctactgt cttcctagca 600
 gaaaatggng agaaactgtt aaagccagaa tgagggatgg ctgtgtgtgg cctgggactg 660
 gcaacanaag tgtcaagctg ccaggtttca agccagtnca gagcacgggt ctacctgggt 720
 tatgtgttgc ccggactaat ggttanagac atctgtcact ggt 763

<210> 3247

<211> 861

<212> DNA

<213> Homo sapiens

<400> 3247

ttgaattcag atgtgcctca gcaacgccc agtgtagtgt tctcaccaca ttctacaacc 60
 tctgtttatac agggacatca aatcatagca gttcccgact caggatcaaa agtatcccat 120
 tctcctgccc catcatctga cgttcgggtt acaaatggca cagcagaatg caaaactgta 180
 aagaggccag cagaggatac tgatagggaa acagncgcag gaattccgaa taaagtagga 240
 gttagaattg ttacaatcag tgaccccaac aatgctggct gcagcgcac aatggttgct 300
 gtgccagcag gagcagatcc aagcactgta gctaaagtag caatagaaag tgctgttcag 360
 caaaagcaac agcatccacc aacatatgta cagaatgtgg tcccgcagaa cactcctatg 420
 ccaccttcac cagctgtaca agtgcagggc cagcctaaca gttctcagcc ttctccattc 480
 agtggatcca gtcagcctgg agatccaatg agaaaacctg gacagaactt catgtgtctg 540
 tggcagtctt gtaaaaagtg gtttcagaca ccctcacagg ttttctacca tgcagcaact 600
 gaacatggag gaaaagatgt atatccaggg cagtgtcttt gggaagggtg tgagcctttt 660
 cagcgacagc ggttttcttt tattaccac ttgcaggata agcactgttc aaaggatgcc 720
 ctacttgcag gattaaaaca ggatgaacca ggacaagccg ggaagtcaag aagtcttcta 780
 ccaaagcagc caactgtang ggggcacaaa gctcaacttc tagagcccaa aaaggnatt 840
 gngaattcatt cccagtggct g 861

<210> 3248

<211> 721

<212> DNA

<213> Homo sapiens

<400> 3248

```

agtccccaca gctgcgccgg tgactgaggg gccgggcagt ggagaagtgg tggcggcggg 60
cggcgggcgg caaaggagca gccatgaggg ccgggcccag tcaccgaccg tgctgaggag 120
tcatggaaga gtttttaaac cagtgtgagc cactgcccc a tttgtgttg atgccaatct 180
gccatgctag cctgtctacc agggccaggt gacctgtcct ttcagcctct ttctcacacg 240
cagatgaaca ctggacttca gaaatgggac actacacaga aaatgagaac tgctcactat 300
cctaccccag ccgaattgga tgcgtatgct aagaaggtcg caaacaaccc actgactata 360
aaaatcttcc ccaacagtgt gaaggttccc cagcggaaac acgttcgtcg tactgtgaac 420
ggcctcgaca catcagccca gcgctacagc ccctaccga cacaggctgc caccaaggca 480
ggcctgcttg ccattgtcaa agtgccagcc aaaagcatac tcaaggactt tgacggcacc 540
cgagcccggg tgctccctga ggccatcatg aacccccag tggcacccta tgctactgtg 600
gcaccagca ctttagccca ccccaggcc caggctctgg cccgncagca ggccctgcag 660
catgcacaga ccctggccca tgccccttcc cagacgcttg cagcaccctt anggtatncc 720
g 721

```

<210> 3249

<211> 841

<212> DNA

<213> Homo sapiens

<400> 3249

```

agacgcgcaa gggcgccgat ggaggcagac tcgccagcgg gccccggcgc cccagagccc 60
ctcgcggagg gagcggcggc cgagttctcc agcctgtgc gcaggataaa aggcaaactc 120
ttcacctgga atattttgaa aacaattgcc ctgggtcaga cgttgtcctt gtgtatatgt 180
gggacagcca tcaccagcca gtatttggca gaaagataca aagtgaacac ccccatgctt 240
cagagcttta tcaattattg ctgtctgttc ctaatttata cagtgatgct ggcatctcga 300

```

tcaggcagtg ataacctttt agtaatcttg aaaagaaaat ggtggaagta catcctgctg 360
 ggactagcag atgtggaagc taattatgtg atcgtcagag cctaccagta cacaactcta 420
 accagtgtcc agcttttggg ttgctttggg attcctgtgt tgatggctct gtcattggtt 480
 attcttcatg caagatacag agtgatccac ttcattgccg tggctgtctg tctgttgggt 540
 gtaggaacca tggttgggtg agacatacta gcaggaggag aagacaattc agggagtgat 600
 gtattgattg gtgacatctt ggtccttctt ggggcttccc tctatgcat ttcaaatgtt 660
 tgtgaggaat acatcgtaga gaagctganc agacaggagt ttttaggaat ggtgggcctg 720
 ttggaacaa ttatcagtg tatacagcta ttgattgtgg aatataagga tattgncagc 780
 attcattggg acttggaata ttgcctgctg tcgtggcatt tgcctgngna tgtttggctg 840
 t 841

<210> 3250

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3250

aatagaagat cgctcgggaa ttcttactct cgataaagat tataacaaca taggaaaatt 60
 cttaaataga attttaggca tggagggtgca tcagcagaat gcgttatttc agtattttgc 120
 ggacacactt actgcagttg ttcaaaatgc caaaaaaaat ggaagatatg atatgggaat 180
 cttagatctt ggttctggag atgaaaaagt gcggaaaagt gatgttaaaa agtttctgac 240
 tccaggatat tcaacctctg gccacgtaga attatacaca attagttag agaggggaat 300
 gtcattgggag gaagctacca agatttgggc tgagctgaca ggaccagacg atggctttta 360
 cttgtcattg caaataagga acaacaagaa aactgccatc ttagttaag aagtgaatcc 420
 taaaaagaaa cttttcttag ttatcgacc aaatactggg aagcagctca aattagaaat 480
 ttatgctgat ctaaaaaga aatataagaa ggtcgtctca gatgatgcc tgatgcactg 540
 gttagatcag tataattcat ctgcagatac ttgtactcat gcttattggc gcggcaattg 600
 caaaaaagca agcttggggc tagtttgtga aataggtctt cgttgccgta catattatgt 660
 attatgtggt tcagtgtga gtgtctggac aaaagttgag ggtgtctagc atctgtcagt 720

ggcacaaacg tgaagatcag atcgtgcggc ttaanaacgg aagatgggcc accggattgt 780
 agggtttggg tcattnccg gcaaaattgg gggggctccc tcttgnaaa tcttcctatc 840
 aacttttagac ccagnct 857

<210> 3251

<211> 754

<212> DNA

<213> Homo sapiens

<400> 3251

agcattggga tgctgtctat gagagagaac tgcaaacttt ccgagaatat ggagatacag 60
 gtgaaatctg gtttggagaa gagagtatga atcgactaat aaggtggatg cagaaacaca 120
 agattccact ggatgcttca gtgcttgata ttggaactgg aaatggtgtt ttcctgggtg 180
 aacttgcaaa atttggtttc tctaataatta ctggaattga ttactctcct tctgcaattc 240
 agctttctgg aagtattata gaaaaagaag gtttatctaa cattaagtta aaggtagaag 300
 actttttgaa tctctccaca cagctgtctg gatttcatat ttgtattgac aaagggactt 360
 ttgatgccat aagccttaat cctgacaatg caattgagaa gaggaagcaa tatgtgaaat 420
 ctctctccag ggtgttgaaa gtaaaaggct ttttctaata aacgtcatgt aattggacca 480
 aggaagagtt gctaaatgaa ttcagtgaag gatttgaact tctcgaagag ctaccaacac 540
 ccaagttcag ctttggaggc agatctggaa acagtgtagc agcattgggtt ttccaaaaaa 600
 tgtgagactt tttcttggac gaattcaggg agttgaccac atttggccat ttcccanaag 660
 ggccccaccc caagggtgag tggccaatgg ggagctgttt ctgctgacat caattcccca 720
 ggangtctca cccaagtct gnccaagtga agat 754

<210> 3252

<211> 736

<212> DNA

<213> Homo sapiens

<400> 3252

```

agtgtctacgc ggaggattag agcaggcggt gcgctggggg cgggagcagc gcggagcccg 60
gctcggccac accgatcgcc cgccgccatg ggctcctcgc aaagcgtcga gatcccgggc 120
gggggcaccg agggctacca cgttctgcgg gtacaagaaa attccccagg acacagagct 180
ggtttggggc ctttctttga ttttattgtt tctattaatg gttcaagatt aaataaagac 240
aatgacactc ttaaggatct gctgaaagca aacgttgaaa agcctgtaaa gatgcttata 300
tatagcagca aaacattgga actgcgagag acctcagtca caccaagtaa cctgtggggc 360
ggccagggct tattgggagt gagcattcgt ttctgcagct ttgatggggc aaatgaaaat 420
gtttggcatg tgctggaggt ggaatcaaat tctcctgcag cactggcagg tcttagacca 480
cacagtgatt atataattgg agcagataca gtcataatg agtctgaaga tctattcagc 540
cttatcgaaa cacatgaagc aaaaccattg aaactgtatg tgtacaacac agacactgat 600
aactgtcgag aagtgattat tacaccaaata tctgcatggg gtggagaang cancctagga 660
tgtggcattg gatatgggta ttgcatcga atacctacac gccatttga nggaaggaaa 720
gaaaaattct ctttca 736

```

<210> 3253

<211> 655

<212> DNA

<213> Homo sapiens

<400> 3253

```

gctgtagaag aggggaggaa acaagccagt gcaaggggag caaaagagaa aaggagccag 60
gctgggcttc ctgatccac agcatcgcag agctcgggag gcacagctca cagacacagg 120
aaacacagga ctgctattct gctctcctgc ccacggatg ctggtgccag ctggtggaac 180
agtgggtgat ggctccctg ctgcaagacc agctgaccac tgatcaggac ttgctgctga 240
tgcaggaagg catgccgatg cgcaagtctc aatctctgat gtggagacaa tacgtaatgg 300
ccatgattcc gagttgctgc gtagcctggc agaggagctc cccctggagc agggcttcac 360
cattgtcttc catggccgcc gctccaacct ggacctgatg gccaacagtg ttgaggaggc 420
ccagatatgg atgcgagggc tccagctgtt ggtggatctt gtcaccagca tggaccatca 480

```

ggagcgcctg gaccagtatc ggcaggatgg agtcagggtg ggggtgaggg atcacgctat 540
ccctgaagga gccagatgca acaggttttag gaaaggcagc agacacgtnc cantctggaa 600
ccctggaagg agaagaattc ntacagttct ataaggcatt gactaaacgt gctga 655

<210> 3254

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3254

ccttacaatt ccagccccta gacatacagt agatgtgcag cttcccagag aagacaaccc 60
tgaagaacct agcaaggaaa tcacctctca cgaggaagga ggtggagacg tttcacctcg 120
aaaagaacct caagagcctg aggtttgccc cacaaagatt aagccgaacc tgagcagctc 180
ccctaggtca gaggaacga cagcctccag cctggtgtgg cctctccctg ctcaccttcc 240
tgaagaggac ctgccagaag gtggctccac agtctcagct cccacagcaa gtgggatgtc 300
ttctcttgaa cacaaccaac caccagttgc actgttggat acggaggaga tgagtgtacc 360
ccaggactgt cacctccttc cctccactga aagcttttcc gggggagtca gtgaagatgt 420
catttctagg cctcattctc ctcttgaaat agtcagtaga gaagaaagtc ctcagtgtc 480
agaaaatcag agttcccaa tgggcttgga gcccccatg agtctgggaa aggctgagga 540
caaccaaagc atcagtgtg aggttgagtc tggagacacc caggagctaa atgtcgaccc 600
actcttgaag gaaagcagca cttttactga tgaaaacccc agtgaaactg aggaaagtga 660
ggcancaggt ggtataggaa aattagaggg agangaccgt gatgtaaaat gcctgtcaga 720
aaaaagacac cnttgataca agcattgctt actcc 755

<210> 3255

<211> 834

<212> DNA

<213> Homo sapiens

<400> 3255

atatgatccg	ctcggcttcc	tgggtctggc	tgctgccgcc	cgccggtgtc	cgcccgtgtc	60
gcgccggggc	accaaggagc	cgttggaggg	tccgggcgga	ggcccgcctc	tgtggaagtc	120
gtcgacgccg	ccgctcgtcc	gtcctcccgt	ccgttctcgc	tcccggccgc	catcatgctg	180
gcgctcatct	cccgcctgct	ggactggttc	cgttcgctct	tctggaagga	agagatggag	240
ctgacgctcg	tggggctgca	gtactcgggc	aagaccacct	tcgtcaatgt	catcgcgtca	300
ggtcaattca	gtgaagatat	gatacccaca	gtgggcttca	acatgaggaa	ggtaactaaa	360
ggtaacgtca	caataaagat	ctgggacata	ggaggacaac	cccgatttcg	aagcatgttg	420
gagcgggtatt	gcagaggagt	caatgctatt	gtttacatga	tagatgctgc	agatcgtgaa	480
aagatagaag	cttcccgaag	tgagctacat	aatcttctag	ataaaccaca	gttacaagga	540
attccagtgc	tagtgcttgg	aaacaagaga	gatcttccta	atgccttgga	tgagaaacag	600
ctaattgaaa	aaatgaatct	gtctgctatt	caggatagag	aaatttgctg	ctattcaatt	660
tcttgcaaa	aaaaggataa	tatagatata	cacttcagt	gcttattcan	cattcaaaat	720
ctagaagaac	tgaacatctt	tgaatcttca	gtccttcttg	ctataatcta	natattgccg	780
ttctctaata	atccaaatac	ggccttctaa	cccaaaaatg	cttttaggct	attt	834

<210> 3256

<211> 658

<212> DNA

<213> Homo sapiens

<400> 3256

gtttggcggt	gcagctgtgt	gggcgctggt	gcgtgcgagt	agcgcctcgaa	gaaacccaaa	60
ggcgctcgtg	ggctgccgtg	tgccccagag	agcactgcag	gccgggtagg	ggctaaggct	120
ccccgcagtc	ttctgtgtgt	cgtccagtac	gcagttgaaa	tcgttctcca	acctggccag	180
tcctccgagg	cccttctcag	gcgaccagac	tctgttaaca	gagtccattg	ctaaaactcc	240
tcgttagtat	ttaccactcc	tccagtctgt	gttttgaagc	agtggttttc	aaccactgcc	300
cgttttcaga	agaaatcatc	tcaagcgctc	gtgtgctgct	agaagccggg	ccgggaggtc	360
ttggtgccgg	actccaccct	gcagcccttc	cctttcgcca	ccgccctgtg	cttagagaaa	420

ccttagagtg gagcaatgag tcgcccttga ctgagtaact cttcggggtc aacttctcct 480
 tccacgccaa ggaaaggatt ccagggcgat gtttctggaa atagagatct gaccaagcca 540
 ctgctctggt gaaaattcag tgggtcccta gcacctagtg cagcggctcc tagcctgagt 600
 attgccgtct ttcgggtgggg aggggttngg gttttttgta ncatctgttg atctgant 658

<210> 3257

<211> 710

<212> DNA

<213> Homo sapiens

<400> 3257

ggacagtgtt tctcgatcag aaattgcctt gggttgcaaa gacctcaatc atgtcagctt 60
 atcttctttg ataccagaac tagatgtcac ctccgaatat attaattcag acactcttgt 120
 cagagagata aacaagcata catctccaga agaataat cttaaatttat ttctgcaaga 180
 aaaaaaacac ataaacctga ctaaactcgg cttaaagtga caaaaacatc ctggaaatga 240
 gaaagaagat tcaactacaat atttggccaa taagaaatat acacaaggcc ggggaagcca 300
 cagccaagaa atgaggtaca atcgacaaaa cagatggaaa cggcagaact ttcattgagtt 360
 tcttcttttg tttgctttcc cgagtctcag ccaaacggat ctggaagaac ttacttattt 420
 tttcccagag gaccatgctg aggatgtaca gcaagagttt ttcccctctt ggcccactcc 480
 ctctggcctc accgagtata gcaccttgac cctctgtcag gagactctag ccaactccag 540
 cataggaagg ctgtgtcttg cttttcttgg caagagatta gacagtgtta tagagatgtg 600
 tgtgaaggat gttctgttaa aagatgatct tagttgggca gaaacaggtg tggccctttt 660
 agaaaatgaa tgtgaaaaga ngattgtgga ggaagggaaa tntaacncaa 710

<210> 3258

<211> 826

<212> DNA

<213> Homo sapiens

<400> 3258

gttgggggtc aggtgccgga agaggaaacc tctcgctggg gctaggagtt cggcggggcg 60
 cgcgccggcg gctgcggagc tggcagggtc gaagcgtctg cacctggcgg gcgatggcgc 120
 ccgatgcggg cgcggcgga tagcgtgggc gaggctgcgg ggccccggcg cgcacgcccg 180
 cacctctccc cagccctggc gtgggcccag cccggcccag gcagcaatgg ggttctctgca 240
 gctgctggtt gtagcgggtc tggcatccga acaccgggtg gctgggtgcag ccgagggtctt 300
 cgggaattcc agcaggggtc ttattgaatt ttctgtgggg aaatttagat acttcgagct 360
 caataggccc tttccagagg aagctatatt gcatgatatt tcaagcaatg tgacttttct 420
 tattttccaa atacactcac agtatcagaa tacaactgtt tccittttctc cgactctcct 480
 ttccaattcc tcggaaacag gcactgccag tggactgggtt ttcattccta gaccagagca 540
 gagtacatgc acttggtact tggggacttc aggcatacag cctgtccaga atatggctat 600
 cctactctcc tactcagaaa gagatcctgt ccctggaggc tgtaatttgg agttcgattt 660
 agatattgat cccaacattt acttggagta taatttcttt gaaacgacta tcaagtttgc 720
 cccagcaaac ctaggctatg ccaaaaggcg tagaatcccc caccatgtga acgcttngga 780
 caagacccaa ggactttcca ggtnggaagg ttgccantat tgaagg 826

<210> 3259

<211> 842

<212> DNA

<213> Homo sapiens

<400> 3259

aatgcctcat gccccagttc agcaaaagga ggaaaatgtg cctgcctcac agtcatcagt 60
 ctttttaaat cttttttgtt gttgttctta agggtttgaa tttgtctgca ttccttgtct 120
 ttaggggaaa ttcccttttc atattgtgtg cttcccaaag ctatagtcac agatttcttc 180
 cagaaactat tgcataatt gtcactggag tgcttaaata tacgtactat actgacaaaa 240
 tacatggaag tgagttataa tgaggcagaa acaaaatcct cggtaacatt gatgatactc 300
 taccgatcac cgtggttttg gaaagtcagt caacagttgt attattgcac tcaatttcat 360
 tgtgacattt tatttaactt ctcatcttg gtggtccttg cccagttatt ttgcctcatt 420

agacatcaag aaatggagaa agactgaaag ttaatatctt aagtgttgt tcttcatgtt 480
 tccttcttgt tatttatgct attctctttg tggtccatt cttctttcaa tcttctcagc 540
 ttataaccgt ctttccctta tgctaaggat agcccttaca ctcatcccat ctatgctgtc 600
 aagggtgct ggttggtgct ggtacaagga gccactcag cagttttctt acctttgcct 660
 gccctgcctt tcatggaata agaaaggcaa cgttttgcag cttccaaatt tctgaagaaa 720
 ctaatctcag attggcagtt aaagtcaaaa tgttgccaaa tatttatcc tttgcctaa 780
 gtttggttac ccgntcaat tgctttttat ttttaatgnc ttgactcttc anagttcgta 840
 cc 842

<210> 3260

<211> 843

<212> DNA

<213> Homo sapiens

<400> 3260

agaagcgggc ggcgCggggg agatgcataa gcttaaatacg tctcagaagg acaaggtccg 60
 ccagtttatg gcgtgcactc aggctggcga gagaactgct atctactgct taacgcagaa 120
 tgagtggaga ctagacgagg ccacggacag cttcttccaa aaccagact cgctccacag 180
 ggagtccatg cggaacgctg tggacaagaa gaagctggag cggtgttacg gcaggtacaa 240
 agatccacaa gatgaaaaca aaattggagt cgatgggatt caacagtttt gtgatgatct 300
 gagcctggat cctgccagta tcagtgtatt ggtcatagcg tggaagtcca gggcagcaac 360
 tcagtgtgaa tttagcagaa aggaatttct agatggcatg acagaacttg ggtgtgacag 420
 catggagaag ctaaaggctc ttctgccaaag actggagcag gagctgaagg acacagccaa 480
 gtttaaagat ttttatcagt ttaccttcac cttcgctaag aaccagggc agaaaggttt 540
 aggttcacct ccatcttca atgtgaaagc tttacatcat taagatgagt tgaatataga 600
 tttcaattaa tgttcttct aagtgataag gatgtagact tataagcagg acaagactaa 660
 tcattcttctt agcattttac tgcgggtccc atcgacttag aaatggctgt tgcgtattgg 720
 aaattagtgt tatctggaag gtttaaattt ttagatctct ggacacattc ttaatggaac 780
 atccaaaaga tcaatttcaa gggacacctg gaaccttctg ctggactttg gaaacatgat 840

tgn

843

<210> 3261

<211> 761

<212> DNA

<213> Homo sapiens

<400> 3261

```
ccatatgccg ccccggagct gtttcagggc aagaagtacg acgggccgga ggtggacatc 60
tggagcctgg gagtcacctt gtacaccctc gtcagcggct ccctgccctt cgacgggcac 120
aacctcaagg agctgcggga gcgagtactc agagggaagt accgggtccc tttctacatg 180
tcaacagact gtgagagcat cctgcggaga tttttggtgc tgaaccacgc taaacgctgt 240
actctcgagc aaatcatgaa agacaaatgg atcaacatcg gctatgaggg tgaggagtgt 300
aagccataca cagagcccga ggaggacttc ggggacacca agagaattga ggtgatggtg 360
ggtatgggct acacacggga agaaatcaaa gagtccttga ccagccagaa gtacaacgaa 420
gtgaccgcca cctacctcct gctgggcagg aagactgagg aggggtggga ccggggcgcc 480
ccagggtctg ccctggcacg ggtgcgggag cccagcgaca ccaccaacgg aacaagtcc 540
agcaaaggca ccagccacag caaagggcag cggagtccct cttccaccta ccaccgtcag 600
cgcaggcata gcgatttctg tggcccatcc cctgcacccc tgcaccccaa acgcagcccg 660
acgagcacgg gggaagcgga gctgaangaa gaaccggctt gncaggcccg gaaaggcgaa 720
cttgcaacac ccgcngggga gttgggaagt cgaagggtt g 761
```

<210> 3262

<211> 776

<212> DNA

<213> Homo sapiens

<400> 3262

```
cattataaat cccagtagca gtctgctggc cagccaagat gagacaaagt tgcctaaaat 60
```

agactttttt gactattcta aattgacccc tcttgaccag cgctgcttca tccaagctgc 120
 tgacctcctc atggccgact tcaaagtgtc cagtagtcag gacatcaagt gggccctgca 180
 cgagctcaaa ggacactatg caatcacccg aaaggccttg tctgatgcca ttaaaaaatg 240
 gcaggagctg tcaccagaaa ccagtggaaa aaggaagaag agaaaaacaaa tgaaccagta 300
 ttcttacatt gattccaagt ttgaacaagg tgacataaaa atagaaaaga ggatgttctt 360
 tcttgaaaat aagcgacgac attgtaggtc ctatgaccga cgtgctctcc ttccagctgt 420
 gcaacaagag caggagtctt atgagcagaa aatcaaagag atggcagagc atgaagactt 480
 tttgcttgcc ctacagatga atgaagaaca gtatcaaaag gatggccagc tgattgagtg 540
 tcgctgctgc tatggggaat ttccattcga ggagctgacg cagtgcgcag atgctcactt 600
 gttctgcaaa gagtgtctca tcagatatgc ccaagaggca gtctttggat ctggaaagtt 660
 ggagctcagc tgcattggaan gcagcttgcc gttgttcgtt cccaaccagt gagctggaaa 720
 aggtgctccc ccagaccatn ctgtataagt actatgagcc aaaaagccna ggaaga 776

<210> 3263

<211> 768

<212> DNA

<213> Homo sapiens

<400> 3263

caaagaatgc taatgcttag cacttgctgt tgagcatgct ctaactttta aagccctggc 60
 ctctgtctc cttagctgct tagctacgag gcctagcaga tcataccca tcagtaatcc 120
 tgtggctaga tccaggggaa aattgtttat gtccaggccc caccctgtc actcataaat 180
 accccttggt ggggtggaat tttagtgttt tcagctaaga aaaccacatt ttctctttcc 240
 ttgcctctct gctaggactg tgagcatctc atagtccact ccctaaacac tttctggtaa 300
 cacctagttt tccgcctgag ggtcagaggc tagaatcatt gcctgcacag caggactacc 360
 ttggttctta aaacttgat caccagggca aggcgtggtg gctcacgcct gtcattctag 420
 cactttggga gactgaggct ggtggatcac ttgaggccac gagtttgaga ccagcctgac 480
 caacgtggtg aaaccccatc tctactaaaa atacaaaaat tagccaggcg tgggtggtggg 540
 cacctgtaat ccagctact tgggaggctg aggcaggaga atcccttgaa ccagaggagc 600

ggaggttgca gtgagcagag atggtgccgc tgcagtccag cctgggtgac agagcgagac 660
tctgtctcaa aacaaaacaa aaaccacaca cacatacaga aatnaagaga aatnatcaac 720
tagaaaaaaa acaaaacttg gatcaccacag aaagagcgtc acagangc 768

<210> 3264

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3264

gaagctctcc tgtttgacga aagtatgtct caggaaggtg cggncaccagc tagcgcggtt 60
cccctggaag aattaagtag ctggccagag gagctatgcc gccgggaact gccgtccgtc 120
ctgccccgac tcctctcatt gtctcaacat tctgaaagtt ggattgagca tattcactgt 180
gaaattattc gatgacatga tgtatgaatt aaccagtcaa gccagaggac tgtcaagcca 240
aaatttgga atccagacca ctctaaggaa tattttacaa acaatgggtgc agctcttagg 300
agctctcaca ggatgtgttc agcatatctg tgccacacag gaatccatca ttttggaana 360
tattcagagt ctccccctct cagtccttca tataattaaa agcacatttg tgcattgtaa 420
gtttcagacc ttctccaggc tcttttcaag gaggcctatt ctcttcaaaa gcagttaatg 480
gaactgctgg acatgggttg catggaccct ttagtagatg acaatgatga tattttgaat 540
atggtaatag ttattcattc tttattggat atctgctctg ntatttccag tatggaccat 600
gcatttcatt ccaatacttg gaagtttata attaagcana gccttaagca ccagtccata 660
ntaaaaagcc agttgaaaca caaagatata attactagct tgtgtgaaga cattcttttc 720
tacttccatt ctgtttacag ttagctgagc agatgacaca gtcngatgca caggataatg 780
ctgctacaga ttatttcaga aaacactcaa attgggtcnt ttttttgnca actccctttg 840

<210> 3265

<211> 846

<212> DNA

<213> Homo sapiens

<400> 3265

atgaggcttc agaggagaat aatgaccagc aatcacaaga agttccagaa aaagtaactg	60
tatccagtga tcatgaggaa gtagacaatc cagaagaaaa accagaagaa gagaaagaag	120
aggttataga tgaccaggag aacctagctc atagcaggag gaccaggga gatagaaagg	180
tagaagccat catgcatgct tttgaaaact tagagaaaag aaagaagcgg cgggatcagc	240
ccttggaaca gagcaactct gatgtagaga ttactacaac cacctcagag actcctgttg	300
gtgaagagac aaaaactgaa gccctgaat ctgaagttag caactctgtt tcaaagtta	360
ccatcccaag caccacacag agtggttggtg tgaatacccg gaggtcttcc caagcagggg	420
atattgctgc agaaaaacta gtccccaagc cacctccagc aaagccttct aggccccggc	480
cgaagagtcg aatttctcg tacaggacca gttcagccca aagactaaag cgtcagaagc	540
aggccaatgc acagcaggca gaattgtcac aagctgcctt ggaagaggga ggaagtaaca	600
gttttagtaac tcctactgaa gctggaagtc tagacagttc aggagaaaac aggccattaa	660
cagggtctga cccaactgtg gtgtcaatta ctggatccca tgtcaacccg tgctgcatct	720
aaatcccaa aaccaaaaag tatctagtta cagaatggtt gaatgacaaa gcagagaanc	780
aggaatgcc tggtgagtc cnttacgta tcacaacgga tccaactgtc tgcaacgacc	840
cttaan	846

<210> 3266

<211> 872

<212> DNA

<213> Homo sapiens

<400> 3266

tgcattttat aaattagtga ttattgtag ttgaatgac tataagtaaa atccttgcac	60
atgcattcaa cagaatacac taggatagaa aatttctgaa aggtatacca gaagctatac	120
atggtggtcc ctagagagtg cagctaggtg tggggaggaa gcagacttat ttactttat	180
gccagttagt gccctttgaa atggtcttaa acagaaatag tgtattactg taataattat	240
agtgaagtac tgcacttggg caggatatc cctccaggg ctctaccct ctctgattt	300

tgcattccagg gacgtcctct gtgcttttga atgtattaag gagtgacgta cggctggatt 360
 cactctgata tcattcactg acagtgggtg gagagcccag agctgagtag aaactgggtc 420
 tggggcatcg tgtggctagg gtgccaaagc cgagaaaggt cccgtagtcc ctgtgtggtc 480
 agcagggaag gcagcagtgc tctgtcagta ttgattcttc aggggcaggc tgcccactta 540
 ccaaagtatt gcttagcaga ggggtctctg ctcactcccc gtccctcatc ctaccagggtg 600
 tgaggctgcc aggagcccga tcgcacaagg cttggcaagg cagatgctcc ccagctcctg 660
 acatcagaga gaagggtctg gattgtggcc tgccggttgg tgggcaagga gagcctggtc 720
 tgatgacagc aaccaccctt tgactacctt ctctgnggct ggtactgnct gattccaacc 780
 tticactgtt gaacagacct tctaccactt ttctactac tccccctaat gataacatac 840
 tgaactcact tttatgaatt tggtagagacc tt 872

<210> 3267

<211> 844

<212> DNA

<213> Homo sapiens

<400> 3267

gnaagtaaga aactttttaa actaaaatct gaaatggagg aaaaagtata caacttgaca 60
 agagaaagag atgagttgat aggcaaattg aaaagtgaag aagaaaaatc ctctgaatta 120
 agctgcagtg ttgacttact aaagaagaga cttgatggta tagaggaagt ggaaagagaa 180
 ataacaagag gaaggtcacg aaaagggtct gagctcacct gcccgaaga taataagatt 240
 aaggaactaa cacttgaaat tgagagactg aagaaacgtc tccaacaatt ggaagtggtc 300
 gaaggggatt tgatgaagac agaagatgag tatgatcagc tggaacagaa atttagaact 360
 gagcaggata aggctaactt cctctctcaa caactagagg agatcaagca ccaaattgcc 420
 aagaataaag caatagagaa gggtagaggt gtgagccagg aagctgaact gagacacaga 480
 tttcggttgg aagaagctaa aagtcgagac ttaaagccg aagtacaagc tcttaaagag 540
 aagattcacg aattaatgaa caaagaagat cagctttctc agctccaggt agattattct 600
 gtacttcaac aaagatttat ggaagaagaa aataagaaca aaaacatggg gcangaggtt 660
 ctcaatctga ccaaagagtt ggagctttcc aagcgctaca gcagagctct tagcccagtg 720

tgaatggaag aagaatggtg gatgttcctg tgacgtcaac tggagtccaa actgatgcag 780
tccagcgggtg aancacagan gaagaaacgc cagctgtatt catacggaaa tccttncagg 840
aaga 844

<210> 3268

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3268

aaaaaaaaa aaaaaaccgg ctgcgcggcgc gtggaggctg ctcccagccg cgcgcgagtc 60
agactcgggt gggggtcccg gcggcggttag cggcggcggc ggtgcgagca tgtcgtggct 120
cttcggcatt aacaagggcc ccaagggtga aggcgcgggg ccgccgccgc ctttgccgcc 180
cgcgcagccc ggggccgagg gcggcgggga ccgcggcttg ggagaccggc cggcgcccaa 240
ggacaaatgg agcaacttcg accccaccgg cctggagcgc gccgccaagg cggcgcgcgga 300
gctggagcac tcgcgttatg ccaaggacgc cctgaatctg gcacagatgc aggagcagac 360
gctgcagttg gagcaacagt ccaagctcaa agagtatgag gccgccgttg agcagctcaa 420
gagcgagcag atccgggcgc aggctgagga gaggaggaag accctgagcg aggagaccg 480
gcagcaccag gccagggccc agtatcaaga caagctggcc cggcagcgct cgaggaccaa 540
ctgaagcagc agcaacttct caatgaggag aatttacgga agcaggagga gtccgtgcag 600
aacaggaagc catgcggcga gccaccgttg agcgggagat ggagctgcgg cacaagaatg 660
agatgctgcn agtgggaagc gaagcccggg cgcgcgccaa aggccaaacg ggagaatgcc 720
ngacnt 726

<210> 3269

<211> 704

<212> DNA

<213> Homo sapiens

<400> 3269

```

atgttcatct tttgtaaagt taaaaaaaaa aaaaaaagcc agcctccaag gctgagaatc 60
gatattaatt tcatgggctt atgggcagtg agataaagca ggtttctggc agccctttcc 120
agccctattg gattttacaa tcttgaactg tgaagacagc gaataaaggt atcaagggt 180
ctgcccgtct ccagctgtct cgggccagag ctcatccaaa tccccacct tccatcccag 240
cctgcagccc tctgaaaggc aggttggatg gcaagaaatg tcagcttgag ccctcgaaga 300
cggctcacta caaggacagt tgggattgtg gctttaggag ggatttatgc agtcctctg 360
gggcagggtga ggaccacggg gtcatgctag agagtcagct caacgtggct gcctgggaca 420
cgtctatgtg ccagagggca gccaaagggga tgactgactc tacatctggt ttagaccag 480
ggctgctcgt ccgggcacca ttgaggtagg gcaagaatgg gctcagcgtg ctggggacca 540
tcctcctctg caaccctgcc ctccctgcat ttacgagccc gtgcgtggca ctgcccgcac 600
cagctagcct gggcatcttc cctctgtgtg atccatttca gggcctgttg cttggncttt 660
ctgaaactcc ancttcttgg gggtgacca cacaagtgaa cctt 704

```

<210> 3270

<211> 741

<212> DNA

<213> Homo sapiens

<400> 3270

```

gttaaaagag cccgnctctc cctcgccggg tcactctttc gccacgggcg gnagttgcac 60
catccggcag ggcggggccc ggccatggcg accgcggagc ccancgggcg cgcgttgccg 120
ttgtctaccc cgggaccccg gccagcggg gctcgggacc gcgcgccggg agctgcgggg 180
ccaccctccg ggcagatcgg taatagagcc ctccgtctgg gggagcgcac ccccgcggcc 240
gtggaaaagc gggggccata catggtgacg cgcgaccct ccattcaagc caagctgcgt 300
cagtgaagtt taacaagggc tatactgctc ttagccagag tccagatgaa aacctggtgt 360
ccctcgactc tgacagtgat ggggagctgg gatccagata ctctccggg tattcatctg 420
cagaggtgaa ccaggatgtg agccggcagc tgcttcagga tgggtatcac ctggatgaga 480
ttccagatga cnaggacttg gacctcatcc cccctaagcc catggcctct tcaacatgct 540

```

cctgctgctg gtgctgtctt ggggactctt cttcctgtac ctttcagtag acattaccct 600
tcaaggtggg ccctgctcac catgaggcct acagagccct gttggccact catagctnac 660
acagtgcant gagcactgaa gtcactgacc cctagaaagt gacctgcang tagcccctta 720
cctggtgctt ctcaggccag a 741

<210> 3271

<211> 855

<212> DNA

<213> Homo sapiens

<400> 3271

cttcaggctg aggaggactt gctcaggccg attccaaaca ttgtgctcgt tcaatgcgta 60
gaaatgattt gcatgatggc atgccgtgat cagaagtcac gcatgagatc catacaccac 120
aggacactac taatctagtc ctttgcaactg ggtcagcctt tggacaggac ccagccctgc 180
accgttcact gtatttggag aaaatggtaa gagttccata ccggctacaa ttctttgagt 240
tcttaatagt ctttcataca ctttctgggt agggaaacaa ccaactaatt gactaacacc 300
accaacaaca aaaaacaaac ccaatccaac aagcagatgg atccgttgcg tgtatatgtt 360
taacagacat ctctaacata cagccattgt tgcacatttt gcaagatgaa ctatttaatg 420
ctgctctgtg tccagtacat gggggagact ttgatcccaa atggcttgta ctatttatgt 480
cactgtaaaa ccaaatccta gggctaataa aaaaattcat ttgtatcttg caatatttat 540
gacgatcggt tagccttcat actggagaat tgacacttat ttggggtaga gataaaagt 600
cttttcaaag tagcaccagt tatctctagg ggtaatttgg ggaacttaaa atgaccttc 660
attgggagtt atggggtgct catttcattt cgtatcatgt cctctgcatt gtggctttct 720
ccaggcatgg gtcgataccg cgaggggttc aaatattctg aactaacctc tntcttctgc 780
aaaagggtca ttgcatact tacacacttg catggnttcc cctgcttcca tacatttctt 840
cactgagcan ggctt 855

<210> 3272

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3272

```

aagtgttgt gccctctgcc gctgctcccg tctctttggc tacgctcgtc agccgggtcgg 60
ccggcgccctc cagccgtgtg ccgctatggg agtcccggcg ttcttccgct ggctcagccg 120
caagtacccg tccatcatag tcaactgcgt ggaagagaag ccaaacgaat gcaatgggtgt 180
aaagattcca gttgatgcca gtaaacctaa tccaaatgat gtggagtttg ataatctgta 240
tttggatntg aatggaatca tccatccctg tncatcctt gaagacaaac cancaccaaa 300
aaatgaagat gaaatgatgg ttgcaatfff tgagtacatt gacagacttt tcagtattgt 360
aagaccaaga agacttctct acatggcaat agatggagtg gcaccacgtg ctaaaatgaa 420
ccagcagcgt tcaaggaggt tcagggcatc aaaagaagga atggaagcag cagtcgagaa 480
gcagcgagtc agggaagaaa tattggcaaa aggtggcttt cttcctccan aagaaataaa 540
agaaagattt gacagcanc tttattacacc aggaactgaa ttcattggaca atcttgctna 600
atgccttcgc tattacatag ctgatcgttt aaataatgac cctgggtgga aaaatttgac 660
agttatttta tctgatgcta gtgctcttgt gaangagaac ataanatcat ggattcattt 720
gaaggcanag agcccaccta accatgaccc aaatactcat catttggttaa tgtg 774

```

<210> 3273

<211> 728

<212> DNA

<213> Homo sapiens

<400> 3273

```

aatcgagcgc cgagagagcg agtcggtgct actggcgctc ggctcggtccg ggtaggcgca 60
gcgggactgg acctgggtgc cgagcgggagc cgctgccatg ggcctgggcg tcagcgctga 120
gcagcccgcga ggcggcgccg agggcttcca cctccacggg gtgcaggaga actccccagc 180
ccagcaggcg ggcctggagc cctactttga cttcatcctc accattgggc actcgaggct 240
gaacaaggag aatgacaccc tgaaggcact actgaaagcc aatgtggaga agcccgtgaa 300

```

gctggaggtg ttcaatatga agaccatgag ggtgcgcgag gtggaggtgg tgcccagcaa 360
 catgtggggc ggccagggcc tactgggtgc cagtgtgcgc ttctgcagct tccgcagggc 420
 cagtgagcag gtgtggcatg tgctggatgt ggaaccatct tcacctgctg cccttgccgg 480
 cctgcgcccc tacacagact atgtggttgg ttcggaccag attctccagg agtccgagga 540
 cttcttttacg ctcatcgagt ctcatgaggg gaagcccttg aagctgatgg tgtataactc 600
 caagtcagac tcctgccggg aggtgactgt aactcccaac gcagcctggg gtgganaggg 660
 caggtacttc gtgggggttg agggctgnan ggccaggtgg gttggggcct gacattgggc 720
 atggacct 728

<210> 3274

<211> 834

<212> DNA

<213> Homo sapiens

<400> 3274

ttttccgcca tctttccgcg ccgccacaat ggtgcgcatg aatgtcctgg cagatgctct 60
 caagagtatc aacaatgccg aaaagagagg caaacgccag gtgcttatta ggccgtgctc 120
 caaagtcate gtccggtttc tcaactgtgat gatgaagcat ggttacattg gcgaatttga 180
 aatcattgat gaccacagag ctgggaaaat tgttgtgaac ctcacaggca ggctaaacaa 240
 gggttgagtg cagtggcacg atcttggcta ctgcaacctc tgtctcccag gttcaagcga 300
 ttctcctgcc tcagcctccc tagtagctga gattacagtg tggggtgatc agccccagat 360
 ttgacgtgca actcaaagac ctggaaaaat ggcagaataa tctgcttcca tcccgccagt 420
 ttgggtaagt tggcctttcc ttaattaaaa gaagttaatg ctaagaattt ctgtggtgca 480
 gtttgactta agggtttttt tctttttttc tgtttaaaac aaagcagtgg taatttgtct 540
 actcttaacc attttgacct aatagctcaa gtgttatcca tatttctttt ctctctcttt 600
 aaaaagagac agggttggcc aggcacagtg gctcacgcct gtgacccatg cattttgggg 660
 angctgangc aggcggatca cctgaggttg ggagttcgag accaccctgc caacatggag 720
 aaccccgtgt ctacctaaaa tccaaaatta gccagcctgg tggcacacac ctgtgatccc 780
 aactacttga aaggttangc aggaaatact tgaccccgga aaaggtncgn gact 834

<210> 3275

<211> 780

<212> DNA

<213> Homo sapiens

<400> 3275

```

aaaaaaaaa aaaaaacttc tacaagtatg gagaaggcaa aaggcaagga gtggacctcc 60
acagagaagt cgagggaaga ggatcagcag gcttctaate aaccaaattc aattgctttg 120
ccaggaacat cagcaaagag aaccaaagaa aaaatgtctg tcaaaggcag taaagtgtc 180
tgccctaaga aaaaggcaga gcacactgac aacccagac ctcagaagaa gataccaatc 240
cctccattac cttctaaact gccacctgtt aatctgattc accgggacat tctgcggggc 300
tggtgccaac aattgaagct gagctccaaa ggccagaaat tggatgcata taagcgctg 360
tgtgcctttg cctacccaaa tcaaaaggat tttcctagca cagcaaaaga ggccaaaatc 420
cggaaatcat tgcaaaaaaa attaaagggt gaaaaggggg aaacgtccct gcaaagttct 480
gagacacatc ctctgaagt ggctcttcct cctgtggggg agccgcctgc cctggaaaat 540
tccactgtc tccttgagg agttaataca gttgtggtga caacttctgc cccagaggct 600
ttgtggcct cctgggcgag aatttcagcc agggcgagga caccagangc agtggaatct 660
cccaagangc ctttggtgtc aagtgggtgtg tggatcatgg gaaaagtctn ccttgcagac 720
acagatgggt gggttcacct gcagtttcat gctgggtcaan cctgggttcc anaaaagcca 780

```

<210> 3276

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3276

```

tagcaaaaaa ctctccaaga agcgcgctgc gaccaccgtc ttacaggagc ttaaaaaact 60
tccacctctt cctgtggtgg aaaagccaaa actatTTTTT aaaaaacgcc ctaaaacaat 120

```

agtaaaggcc ggaccagaat atggccaagg gatgaaccct attagccgcc tggcgcaaat 180
 tcaacaggcc aaaaaggaaa aggagccgga ttatgttttg ctttcagaaa gaggaatgcc 240
 tcgacgtcga gaatttgtga tgcaggtgaa ggtaggcaat gaagttgcta caggaacagg 300
 acctaataaa aagatagcca aaaaaaatgc tgcagaagca atgctgttac aacttggtta 360
 taaagcatcc actaatcttc aggatcaact tgagaagaca ggggaaaaca aaggatggag 420
 tgggtccaaag cctgggtttc ctgaaccaac aaataatact ccaaaaggaa ttcttcattt 480
 gtctcctgat gtttatcaag agatggaagc cagccgccac aaagtaatct ctggcactac 540
 tctaggctat ttgtcaccca aagatatgaa ccaaccttca agctctttct tcagtatata 600
 tcccacatcg aatagttcag ctacaattgc cagggaactn cttatgaatg gaacatcttc 660
 tacagcttga agccataggt ttaaaaggaa gttctnctac ttnccttgg tcttcagtac 720
 aacctttaaa acaactggaa tatttagcaa ggattcaagg ctttcaggtg tgaattaaaa 780
 gcaaaaaccn 790

<210> 3277

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3277

caaaaaaaaa aaggacctag gcgcggttagc tggggctggc ttttgagggg cgcgggcagc 60
 cttctgactg ggtcggaggc ctgcgggccc gaagcctctg tccctcctgt tcttgtccgg 120
 cgctgcttag cccctccgcg tagtcatcat ggatctgatt ttaaaccgaa tggattatct 180
 gcaggtggga gtaacatctc agaagactat gaagctaatt cctgcctcaa gacacagagc 240
 tacacaaaag gtggttattg gagatcatga tggggtagtt atgtgctttg gcatgaagaa 300
 aggagaagca gcagcagtgt tcaagacttt acccgggccg aagattgcaa ggctggaact 360
 gggagggggtt atcaacacac ctcaggagaa aatttttatt gctgcagcat ctgagattag 420
 aggcttcaca aaaagaggaa aacagttcct ctcctttgaa acaaacctca ctgaaagcat 480
 taaagctatg cacatatctg gctcagacct cttctcagt gcaagttaca tctataacca 540
 ttattgtgac tgcaaagacc aacattatta ctttctggg gataaaatca atgatgtgat 600

ctgnctttca atggaaagaa tatntcgtat nacacctg

638

<210> 3278

<211> 703

<212> DNA

<213> Homo sapiens

<400> 3278

```

agaccacttt cttcattctt ttctaaactg ctgcagattg ccgtgaactc tatcaatagt 60
ctcttttccg caggcaaagt ggcattttct aaacatgttt gcttactgcc aggtggtttg 120
aaatctatga ttactgcag tagtatgtgc ttaaaacaac tgttgaggtc ttttaagcag 180
gaaagttcaa aaggaagtgt cctgataatg gtactggttt ttctacaaat ataagtagtc 240
attagaagtt tgcaaccacc accaagtctg agagaactct gggatattct gtgggttttg 300
gcatattaga tagagaaaat gacagatcta gatgaaggga gcttttggat gtgtgccttt 360
aaaaactgat tatgtataaa tactgatatt tcacatacgg agatatttga agaccaagt 420
ctgcctttca cagagccctc cattccaagt ttagtttttg tcaaaatatg aatcatttta 480
tttgactgta ctatcagtac acaaatgcat gagtatgttt atacagtgtt agactgatgt 540
gaatttgcatt ttgttacatt acattgccag cgcataatcat ttagcaagtt ggcattaaca 600
tttatgcitt aattaaatgc cagtatacct atgtgtgcag cagtaaaaaa ttagtgagaa 660
aaagcaactt ttgncactc ttangnaaaa ttttggctta ata 703

```

<210> 3279

<211> 752

<212> DNA

<213> Homo sapiens

<400> 3279

```

aaagcggcgg gagggagccg agagacccga gtgcacgtgt ggagaagcgg cggcacaagc 60
gcggcggcgg gagacactcc cgccccacc agactcaagc cctcactcga ctctcgcggc 120

```


cttcgttgct cgcacagctc cctgcccagg ctaggaggcc ggcttgcggg gttgagtggc 180
 ccgagctaag ggtgcggaga cctaagggcg gcgactacga cggcgttgat atcggtggta 240
 acgacggcct cagcaggcgg ggaagatgaa aggtagccgg atcgagctgg gagatgtgac 300
 accacacaat attaaacagt tgaaaagatt gaatcaggtc atctttccag tcagctacaa 360
 tgacaagttc tacaaggatg tgctggagggt tggcgagcta gcaaaacttg cctatttcaa 420
 tgatatigct gtaggtgcag tatgctgtag ggtggatcat tcacagaatc agaagagact 480
 ttacatcatg aacttaggat gtctggcacc ttaccgaagg ctaggaatag gaactaaaat 540
 gttaaatcat gtcttaaaca tctgtgaaaa agatgggtact ttgacaaca tttatctgca 600
 tgtccagatc agcaatgagt cggcaattga cttctacagg aagtttggct ttgagattat 660
 tgagacaaaag aagaactact atnagaggat agagcccga natgctcatg tgctgcagaa 720
 aaacctcaaa gttccttctt ggtcanaatg ca 752

<210> 3280

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3280

agacgacgta gcagccatct tttccctggc ttggtgatt cagccctgac ttctcaaaaa 60
 gcactgcaca gaggaggagg cagcagaacc ccacttcagc ttcttaggac tctgcacttc 120
 cccagaagga agaattaaaa atgaatatgt tcaaggaagc agtgaccttc aaggacgtgg 180
 ctgtggcctt cacggaggag gaattggggc tgctggggcc tgcccagagg aagctgtacc 240
 gagatgtgat ggtggagaac tttaggaacc tgctgtcagt ggggcatcca cccttcaaac 300
 aagatgtatc acctatagaa agaaatgagc agctttggat aatgacgaca gcaacccgaa 360
 gacagggaaa tttaggagag aaaaatcaaa gtaagttaat tactgttcaa gacagagaat 420
 cagaagaaga gctttcttgt tggcaaatct ggcaacaaat tgcaaatgac ttaaccaggt 480
 gtcaagactc catgatcaat aattctcagt gtcacaaaca aggtgatttc ccttaccagg 540
 tagggacaga actgtctatt caaatttctg aagatgagaa ctatatagta aataaagcag 600
 atggtcccaa taatactggg aatccagagt ttcctatctt gagaaccag gattcttggg 660

ggaaaacatt cctgactgag tcacagagat tgacagagat cagcaaattt ccataaaaaa 720
 taaattatgt caatgtaaga anggtgttga tcccatcggn tggatttcac atcatgatgg 780
 tcatagagtn c 791

<210> 3281

<211> 897

<212> DNA

<213> Homo sapiens

<400> 3281

aattgcagcc tgtcactctg cccacacgtc tgcagccaag acgcagggtg ggcacgtgta 60
 catgtggggc cagtgcggg gtcagtcctg gatcctcccg cacctcacc acttctcctg 120
 caccgacgac gtgtttgcct gctttgccac tcccgccgtc tcgtggcgcc tcctgtctgt 180
 ggagcatgaa gactttttaa cagttgcaga gtcactgaag aaagaatttg atagtccaga 240
 aactgctgat ctgaagtttc gaattgatgg aaaatatatt catgtccata aagctgtttt 300
 gaaaatcagg tgtgagcatt ttgatccat gttccagtcg tattggaatg aagacatgaa 360
 ggaagtgata gaaatcgatc agttttctta cccagtgtat cgtgcctttc tccagtacct 420
 ctacacagac acagtcgacc tgccgccaga agatgctata ggtcttctgg atttggcgac 480
 atcttactgt gaaaacagac tgaaaaaact ttgtcagcac attatcaaga gaggaattac 540
 tgtggagaat gccttttcgc tattctctgc tgcagtcaga tatgatgcag aggatttaga 600
 agaattctgc ttaagtttt gcatcaatca tttgacagaa gttacacaga ctgcagcatt 660
 ttggcaaatg gatggccctc tgctaaagga attcattgct aaagccagta aatgtggagc 720
 cttaagaac tgaagcgcaa ggctgctggg ttctgtgtga ntgctctggg gcactgggtga 780
 ngatgtgtcc agtttggtc tacggtgatg tgattcttgc aggtaaaaga ccattaggtg 840
 gtttttttca cattnggaca cagttggtg ttaggaaca tacaaggtg ccgnttt 897

<210> 3282

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3282

```

ttttctctgc ttttcgtac cccggtcact ctcatctctc tcccctattc cttgtctctt 60
cccccatccc cttttctcct gtccctcccc tgccctctaca gtggttctcc ccgctgagct 120
gccaccagct gctgggcccc gggctgctgc ggctgggccg cctatggctg cggccccct 180
cccatacagc cccggccccct ggtctctggc tgtcagggtt tggcctcctt cgtggtgacc 240
acctcttcct gtgctcagcg ccgggcccag gccccccagc ccctgaggac atggtgcatc 300
tgcggcggct acaggagatc agtgtggttt ctgcagctga caccacagat aagaaagagc 360
atttggtcct ggtggagaca ggaaggaccc tgtatctgca aggagagggc cggctggact 420
tcacggcatg gaacgcagcc attgggggcg cggctggtgg gggcggcaca gggctgcagg 480
agcagcagat gagccggggt gacatcccca tcatcgtgga tgcctgcac agttttgtta 540
cccagcatgg gctccggctg gaaggtgtat accggaaagg gggcgctcgt gcccgcagcc 600
tgagactcct ggctgagttc cgtcgggatg cccggctcgt gaagctccga ccaggggagc 660
actttgtgga ggatgtcact gacacactta aacgcttctt tcgtgagctc gatgaccctt 720
gtgaccttnt gcacnggttg ctggcttcgc tggaaggga gcttgctggg aatttct 777

```

<210> 3283

<211> 800

<212> DNA

<213> Homo sapiens

<400> 3283

```

agcgaggatg tgcgcagcga cttccagcgc agagtgcctt acaactacct gcagcgggcc 60
tacatcaagc ttaaccagct cgaaaaagca gtggaagcag ctacacatt tttcgtggct 120
aaccctgagc acatggaaat gcagcagaac attgagaatt acagggcgac agctggtgtt 180
gaagcattgc agttggtaga cagagaagcc aagccacaca tggagagtta caatgcagga 240
gttaaacatt atgaggctga tgactttgag atggctatca ggcatttcga acaagcctta 300
agagaatatt tcgttgaaga tacagaatgc cggaccctat gtgaggggcc tcagagattt 360

```

gaagaatatg agtatttagg gtataaggct ggtctgtatg aagctattgc agatcactac 420
 atgcaggtgc ttgtttgtca gcatgaatgt gtgagggaaac ttgccacccg ccctggccgc 480
 ctctctccca tcgagaattt tcttcctctg cactatgatt acctacagtt tgcctactat 540
 cgagttggtg agtatgtgaa agccctggag tgtgccaaag cctatcttct atgccatcca 600
 gatgatgagg atgtcctaga caatgtggat tactatgaga gtctgctgga tgatagcatt 660
 gaccggcat ccattgaggc cagagaggat ttaacaatgt tcgtgaaacg tcataagctg 720
 gagtctgagc tgataaaatc agctgcanaa ngctctgggt ttcactactg aaccgaatta 780
 ttggatcaga tntggaggac 800

<210> 3284

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3284

cataacaagc caaacgccag accgagagtg cctccgtgcg cgagtgcccg gtgtgtgcgc 60
 gccgngaga gcaggggccc gaccggctcc ccgccgccg cgggccgaac tcatgcagct 120
 ccgagcgagc gagcggcgcc cagcccagcg cctcggccga acccctccgc agcaggctgc 180
 ctgctgtttc ccggggagat catgaaacga ggctgccttc ccagcagcag tgaggattct 240
 gacgacaatg gcagcctgtc aactacttgg tcccagaatt cccgatccca gcataggaga 300
 agctcctgct ccagacatga agatcgaaag cttcagagg tgttaggac agacctgac 360
 actgccatga agttgcatga ctctaccag ctgaatccgg atgagtacta tgtgttgga 420
 gatccctgga gacaggaatg ggagaaaggg gtccagggtc ctgtgagccc ggggaccatc 480
 cctcagcctg tggccagggt tgtgtctgaa gagaaatccc tcatgttcat caggcccaag 540
 aagtacatcg tgtcatcagg ctctgagcct cccgagttgg gctatgtgga catccggacg 600
 ctggctgaca gcgtgtgtcg ctatgacctc aatgacatgg atgctgcatg gctggaactg 660
 accaatgaag aatttaagga gatgggaatg cctgaactag atgaatacac catggagagg 720
 gtcctagagg aatttgagca ncgatgctac gacaatatga atcatgcat agagacttga 780
 ggaagcctgg ggatcgaata tgatgaaana tgttggtgn gatgtctggc a 831

<210> 3285

<211> 901

<212> DNA

<213> Homo sapiens

<400> 3285

```

aatccaactc acctccatgt tcaaggatgt ccctctgact gcagaagagg tggaatttgt 60
ggtggaaaaa gcattgagca tgttctccaa gatgaatctt caagaaatac cacctttggt 120
ctatcagctt ctggttctct cctccaaggg aagcagaaag agtgtttttg aaggaatcat 180
agccttcttc agtgactag ataagcagca caatgaggaa cagagtgggtg acgagctatt 240
ggatgttggtc actgtgccat caggtgaact tcgtcatgtg gaaggcacca ttattctaca 300
cattgtgttt gccatcaaat tggactatga actaggcaga gaactcgtga aacacttaaa 360
ggtaggacag caaggagatt ccaataataa cttaagtccc ttcagcattg ctcttcttct 420
gtctgtaaca agaatacaaa gatttcagga ccaggtgctt gatcttttaa agacttcggt 480
tgtaaagagc tttaaggatc ttcaactcct ccaaggctca aaatttcttc agaatctagt 540
tcctcataga tcttatgttt caaccatgat cttggaagta gtgaagaata gcgttcatag 600
ctgggaccat gttactcagg gcctcgtaga acttggtttc attttgatgg attcatatgg 660
gccaaagaag gttcttgatg gaaaaactat tgaaaccagc ccaagtcttt ctagaatgcc 720
aaaccagcat gcatgtaagc tcggagctaa tatcctgttg gaaactttta agatccatga 780
gatgatcaga ccagaaaatt ttggagcagg tcctcaacan ggttggtacc agacatcttc 840
tnccatcagn cattcttaga cctgctttta aatatcgcat gtatgcccc ttagttcttc 900
a 901

```

<210> 3286

<211> 800

<212> DNA

<213> Homo sapiens

<400> 3286

```

agcagtttct gtgggaggac aggggaacct gcgtttctac tgtgtgattc tgccaccttc 60
ctggccccgac gccatgggag tgacttgtgt gtcccagatg cctgtggccg agggcaagag 120
tgttcagcaa accgtagagc tccttaccgc gaaattggag atgcttgggg cagagaagca 180
aggaacattt tgtgtggact gtgagactta ccatacggcc gcctctaccc ttggcagcca 240
aggctcagacc gggaagctga tgtatgtgat gcacaactca nagtaccat tgagctgttt 300
cgccctcttt gagaatggcc ctgccttat tgctgacacc aactttgatg tgcttatggt 360
gaagctcaag ggctttttcc agagtgctaa ggccagcaag attgagaccc ggggcaccag 420
gtaccagtac tgtgacttcc tgggtgaagg gggcacggtc acaatggggc ccagtggccg 480
gggcatctct gtggagggtg agtatggccc ctgtgtggta gctagtact gctggagtct 540
gctgctcgag ttctacaga gttttctagg cagccacaca ccaggggctc ccgcagtgtt 600
tgggaacaga catgatgcgg tctacgggcc agcagatacc atgggccagt acatggaact 660
cttnaacaag atccgcaagc agcaacaggt gccggtggct gggattcggt agtgatgaac 720
anctgccaac tgaactcttg tcaccagggg tacttcacan gaaggaacag gtgctgactt 780
ttaaggtccc ttgganccca 800

```

<210> 3287

<211> 896

<212> DNA

<213> Homo sapiens

<400> 3287

```

acttaaaagt gaggggaaaa ctgagacaac aatgcaagt ggtaatagtc aaacaaaagt 60
taaagggtgaa gattcaaaaa atataccatt ggagaaagaa acaagaaaat cactggtttc 120
agattcaggt ggacaaagga caagtataa aatccaagaa tatccacagc tcagagaaga 180
aacgatctag ccctgctatt tcagatcttt cacagatcct taagtctcaa gatgaatcag 240
catttttaga gagttcaaat gaagtttcag ttgctgaaaa ccaatcctat aaatctccat 300
cagagaccca tgataaatca ctacaacag tatcatccag caaagaagtt caagattcac 360
tgtctgttgg aacattggct caaaaaaacg aaacagtgat atcaccattc attttacctc 420

```

ctgttcttac agaaagtaaa aaggctgatg tttcagaaga acaattacaa aagatgactg 480
aagaacaaac ttaccaagca gcagaaaaat ctcaagctca taatgaagta ccaaagtaa 540
ggcttgtagt tgagcatcaa gaatcattgt caaaaaccaa attacaagta aagaacaag 600
aaacttctac agagcaacca ctcaccactc ctgataaaga accaaatgaa aatcttatac 660
ttaggcatca agactcaatg tcaaaatcag aaatgcaagt gaaggaacaa agaactctca 720
aagggcaaag aattattact catgatgaag aaccaggcaa aaatttgtgc ctgacatcaa 780
ggattcagtg tcaaaactgg aaatgcaaat tggaaaaaac cnaaaaactt tctagagagg 840
aaaagaccta gtncatcatg atgaagaatc aggtggaaaa tcctattgct tnaacc 896

<210> 3288

<211> 919

<212> DNA

<213> Homo sapiens

<400> 3288

tttaaaaggg acagggtaca gttttattgg cttagagaaa aaaagcgggg gcagggatga 60
ggtagacagtc ctctcacct gaataattgc agctgaggat taaacatata tcttcccaa 120
tactttatct tctaggtata ctctcttac aatttattag aaagctggtt acttgagata 180
actaaagaga tactaatttt catgcaaacc catcacaatg tattgaaact gagatacttt 240
tctgctgcta acatatttag gaaaaatagt ttatttttta gtaaataaaa tctccactta 300
tttcaataaa aatggcaagg agaaaatgtc ataagattat cctgccatgt aaaataagct 360
gctcccaaaa ggactgtgtc aagattggtt taaatagaa aatatctatt taaatatat 420
ttagattata attgcctggg ggttggcaaa ctttttctgt aaagggccag atactaaata 480
ccttaggctg tacgggcctt cagatctctg tcacaactgt tcacccgcgc ggtgtagtgt 540
gaaggcatcc acagacaaaa tgtaaacaca cagggtgtgc tgttctaata aaacctcacc 600
aaacaggcag cacaggccac agtatgctga cctctgcact agcctcatct caggttaact 660
gtcctctagt tattaaaaa gaaacccaaa attaagttac acaaaagtaa tttttaaaaa 720
ctactttgga ccgttaaaat ggggcccaag gtagaatnca ccggaggtaa aagttcttga 780
ccaagccagt cagggaat ctggaatgaa ttctggccct ttggtcttgc ccataacca 840

gctggggaan ctctttgggc caaatcacca ttattccctt ntggggaatt tcctttattg 900
gcaatcntct taaatctgg 919

<210> 3289

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3289

gctagaatgc actgtctttg aagcattgag caggccctca ccagacacca aatctgctgg 60
ttcctggatc ttggacttcc cagcctcata actaggcatc acaaatctcc gagaggaacg 120
catccacttc ctggcctggt agagcggaga gcagaggtgg gccagagggt ccaagaactt 180
cccctaaggc tgctagtgcg acccatctct tgagcagaga cccaagaggg caggacagga 240
agaatggaag tgagatttgg ccccggtcat gttttccaaa gtgctgacat caggaaaata 300
atagaagtta acgcagatat ggggctgcca ctgaggagag agaagactga aagaagcata 360
tagataaaag tttcagttac ctgagggtcaa ctttggtctg aaattagatt atctgagtag 420
gctgaaccat cggtgaaaag gaggccaagc atctcaaaaa taggacacgt gagagtatgg 480
agccaatgtg acactcaggt gagttagcct tatgatccct aagcatgcag tccttgacc 540
agatgcatca ggatcttctg gtaagtgtgc taaaatatag gctactgaga cccaccctat 600
gtctgtcaaa tcagaatatt ctaaggaagc aggtcccagg gaatatatat tttaaagctc 660
cctaaataca cttcatgggc tgccagattt gggaatcgca ggattaggta gctacctaaa 720
tgaagacact taaatgtgcc aaaagcttct ctttcacca tncatttacc ctctattcac 780
ccatccttaa ccaaactgtg gccagtatct ggatttgctt natgacctgt actgctgngg 840
tggtgcaaa 849

<210> 3290

<211> 704

<212> DNA

<213> Homo sapiens

<400> 3290

```

ggaaatctag ttcgggaaaa gtgtgagggg ctcttcacgt ggggaaggaa cagcaggcgc 60
ggaggagggg gcaagcgtgt gtgagattca gtgtccatg cgtgcgtttg tcgtgtgctg 120
gtgattgggt gtggcaactc agaactgagt gagcaactgt atgatgtggg ctatcgggat 180
atagtgaaca tcgacatcag tgaggttgct atcaagcaaa tgaaggaatg taatgccacc 240
cgacggcccc agatgagctt cttgaagatg gacatgacgc agatggagtt tcctgatgcc 300
tcgttccagg tgggtgtgga caagggcacc ctggatgctg tcctgacaga tgaggaagag 360
aagaccttac aacaggtgga caggatgctg gctgaggttg gccgtgtcct gcaggtgggc 420
ggtcgtatc tctgcatctc cctggctcag gctcacatcc tgaagaaagc agtgggccac 480
ttctcccggg aggggtgat ggtgaggggtg caccaagtgg ccaacagcca ggaccaggtg 540
ttggaagcag agcctcagtt ctccttgcc tctttgcct tcatcatgac caagttcagg 600
ccagtccctg gctctgccct tcagatcttt gagctgtgtg ctcanganca gcgcaagcct 660
gtgccggctg gaaaagtgcc caaccggctg gccnaagcgg tgca 704

```

<210> 3291

<211> 792

<212> DNA

<213> Homo sapiens

<400> 3291

```

ctactccgag aggccccggg tccctctgcc acaacttctg tcgctctgcc gcctgcaccg 60
tgaccgcac tattcacggg agccctagag aggacaccgg gacaccaga agccggggaa 120
tgatgtttca ggattcagtg gcctttgagg atgtggctgt cagcttcacc caggaggagt 180
gggctttgct ggatccttcc cagaagaatc tctacagga tgtgatgcag gaaaccttca 240
agaacctgac ctctgtagga aaaacatgga aagttcagaa cattgaagat gagtacaaaa 300
atcccaggag aaatctaagt cttatgagag agaaactctg tgaaagtaaa gaaagtcac 360
actgtggaga aagcttcaac cagattgcag atgacatgct gaacaggaaa actcttctg 420
gaataacacc atgtgaaagc agtgtgtgtg gagaagttgg cacgggtcat tcattcttta 480

```

atacgcatat cagagctgac actggacaca agtcatctga gtatcaggaa tatggagaga 540
atccatataag aaataaggaa tgtaagaaag ccttcagtta tcttgactcc tttcaatcac 600
atgataaagc ttgcaactaaa gagaaactct atgatggtaa agaattgtaca gaaaccttca 660
tttccattca tgcattcaaa gacacagggt aatgcacagt ggagatggcc ttataaatgt 720
aagtttgtgg gaaagccttc tattttctca atttatgnct tatncatgaa cgaattcccc 780
tggtgtgaaa nc 792

<210> 3292

<211> 859

<212> DNA

<213> Homo sapiens

<400> 3292

gaggcgctcc gggatactga gggcggaggg cggtggcagc gctggcgctg gggaccggct 60
tggtggcttc gggaaacagt ttggcgccgg cggccgtccg tggttactccg catcccggcc 120
cgtctcggca cggctagcag ccccttgccc accagcgtcc agcaatgtgt ctcaccggcc 180
gggcgtagca gctgcgcgtg cgcggaaccg cggggccatg agcgaagccg gcggccgggg 240
ctgtgggtcc ccggttcccc agcgagcgcg atggagacta gtggcggcga cggccgcgtt 300
ctgcctgggtg tcggccacct ccgtgtggac ggcgggggcc gagcccatga gtagggagga 360
gaaacagaag cttgggaatc aagtactgga aatgtttgat catgcttatg gtaactatat 420
ggaacatgct taccctgctg atgaactcat gcctttaacc tntagaggtc gagttagagg 480
ccaagagcca agtcgcggtg acgttgatga tgccttggga aaattttctc tgacactgat 540
tgattctttg gacactttag aggtgattac ctctagccat cagccttact ccatcccatg 600
tttggtatgc aatttgagcc acaaggctcg tatcgccaac agctatatac attttgttcc 660
atttttctgt cttacagagc catgatagaa ctgtggttag tgagttaaaa ttcctggagt 720
aactactggt tttctncttt gaaacttagg tttctaaagt tgcacctaag gaatctgtca 780
cattttctgg tgaatcatgg gttttggttt tggttttaac anatattcct tttgatacgg 840
actttaaaaa ttanggnat 859

<210> 3293

<211> 710

<212> DNA

<213> Homo sapiens

<400> 3293

```

atctttaaca tttgggatgc tgccccacgc cgcctgccac tcctgctcag aagacagtgg    60
ctctgacgtc tccagcatct cccacccacac ttcgccgggc agcagcagcc ccgacatctc   120
ctttctgcag cctctctccc ctcccaagac ccatcgtcac cgcggggcct gggtcccagc   180
cggcagcaga gagctggtcg cccaccaccc caagctactg ctgccgcctg gctatttccc   240
ggcgggggcgg tacgtggtgg tggctgagag cccctgccg cctggcgagt gggagctgcg   300
ccgcgcagcc ccgggccctg cttacgagga ggagggcact cccctgcgct accagcgtct   360
ggtgccctcc cgcagccgca tcgtgcggac gccctccctg aaggacagcc cggcaggccg   420
ggggctcagc aaggccgccg tgtccgagga gctcaagtgg tggcacgagc gtgcacgcct   480
ccggagcacc cgccccact cactggaccg ccaaggagct ttccgggtca ggagcctgcc   540
ccttgggaga gagggcttcg gacgagccct gggaccccgg gcacaggtgc ccacagtttg   600
tgtgctgcgg agatcgcttg atggggcccc tgtgcaagtc tttgtacctg aaaaaggaga   660
gatcatcanc caggtgtaac tnttngccc cacgctggaa aaaactggtt                710

```

<210> 3294

<211> 870

<212> DNA

<213> Homo sapiens

<400> 3294

```

tttctatgac ccagagggtg ggtccatcac tcaagtagcc agagttgtca tcgagagaat    60
cgcacggaag ggtgaacaat gcaatattgt acctgacaat gtcgatgata ttgtagctga   120
cctggctcca gaagagaaag atgaagatga caccctgaa acctgcatct actccaactg   180
gtcccatggt tccgcctgca gtcctccac ctgtgacaaa ggcaagagga tgcgacagcg   240

```

catgctgaaa gcacagctgg acctcagcgt cccctgccct gacacccagg acttccagcc 300
 ctgcatgggc cctggctgca gtgacgaaga cggctccacc tgcacatgt ccgagtggat 360
 cacctggctg ccctgcagca tctcctgcgg catgggcatg aggtcccggg agaggtatgt 420
 gaagcagttc ccggaggacg gctccgtgtg cacgctgccc actgaggaaa cggagaagtg 480
 cacgggtcaac gaggagtgtt ctcccagcag ctgcctgatg accgagtggg gcgagtggga 540
 cgagtgcagc gccacctgcg gcatgggcat gaagaagcgg caccgcatga tcaagatgaa 600
 ccccgcatg ggtccatgt gcaaagccga gacatcacag gcagagaagt gcatgatgcc 660
 agagtgccac accatcccat gcttgctgtc cccatgggtc gagtggagtg actgcagcgt 720
 gacctgcggg aaggcatgcg aaccgcagc cggatgctca agtctctggc agaacttga 780
 gactgcaatg aaggatcttg gaancaggtt ggaaaaantg cattgcttcc cttgaatgcc 840
 ccatttgact ggtgagcttc accnaatggg 870

<210> 3295

<211> 845

<212> DNA

<213> Homo sapiens

<400> 3295

gatactatga tgctgaatgt gcggaatctg tttgagcagc ttgtgcgccg ggtggagatt 60
 ctgagtgaag gaaatgaagt ccaatttatc cagttggcga aggactttga ggatttccgt 120
 aaaaagtggc agaggactga ccatgagctg gggaaataca aggatctttt gatgaaagca 180
 gagactgagc gaagtgtctt ggatgttaag ctgaagcatg cacgtaatca ggtggatgta 240
 gagatcaaac ggagacagag agctgaggct gactgcgaaa agctggaacg acagattcag 300
 ctgattcgag agatgctcat gtgtgacaca tctggcagca ttcaactaag cgaggagcaa 360
 aaatcagctc tggcttttct caacagaggc caaccatcca gcagcaatgc tgggaacaaa 420
 agactatcaa ccattgatga atctggttcc atttatcag atatcagctt tgacaagact 480
 gatgaatcac tggattggga ctcttctttg gtgaagactt tcaaactgaa gaagagagaa 540
 aagaggcgct ctactagccg acagtttggt gatggtcccc ctggacctgt aaagaaaact 600
 cgttccattg gctctgcagt agaccagggg aatgaatcca tagttgcaaa aactacagt 660

actgttccca atgatggcgg gcccatcgaa gctgtgtcca ctattgagac tgtgccatat 720
 tggaccagga accgaaggaa aacaggtact ttacaaacct ttggaaccag tggacttcac 780
 ccttgaacca ggcaaggcca acnttgggag cccaagaaa ccttggggna cccggaccan 840
 ttggt 845

<210> 3296

<211> 858

<212> DNA

<213> Homo sapiens

<400> 3296

atttcctcca gctagaggag ctcaactgat ctgttttctt tcgcccagcc aaaatcacag 60
 aatgaaggcg gtgaagagcg aacgggagcg agggagccgg cgaagacacc gggacgggga 120
 cgtggtgctg ccggcggggg tggtagtga gaggagcgt ctgagcccag aagtcgcacc 180
 tccccccac cgcgtccgg accactccgg tggtagcccg tctccgccga ccagcgagcc 240
 ggcccgtcgc ggccaccgcg ggaaccgagc ccgaggagtt agccggtccc caccacaaaa 300
 gaaaaacaag gcctcaggga gaagaagcaa gtctcctcgc agtaagagaa accgaagtcc 360
 tcaccactca acagtcaaag tgaagcagga gcgtgaggat catccccgga gaggacggga 420
 ggatcggcag cacagggaac catcagaaca ggaacacagg agagctagga acagtgaccg 480
 ggacagacac cggggccatt cccaccaaag gagaacgtct aacgagaggc ctgggagtgg 540
 gcagggtcag ggacgggatc gagacactca gaacctgcag gctcaggaag aagagcggga 600
 gtcttataat gccaggcgac gggagcatcg ccagaggaat gacgttggtg gtggcggcag 660
 tgagttttca ggagtgtgtt cctcggcctg gttggcaaca acaaaagaaa aaagangtgc 720
 ccgcttaaag aaaaaccaag cttttgaact ttcttggggc acttttttga ggacaccaac 780
 acttttccgg ggtggttaagt canttaaatt ttngtgagcc cccanaaaac ccgtttttcc 840
 ccaaaaaaac ggtggcgt 858

<210> 3297

<211> 887

<212> DNA

<213> Homo sapiens

<400> 3297

```

gatgatatga gtaatgctgg tgattttcta aatgacaatg cagttgagat cccttctttt   60
tcaaaaggga ttataaatga tgatgaggat gatgaagacc tcatgatggc ttcaggtcgt   120
cctagacagc gaagtcacat cctagaagat gatgaaaact cagttgatat ctcaatgcta   180
aaaactgggt ctagtcttct caaagaggag gaggaagatg gtcaagaagg cagcattcac   240
aatctaccac ttgtaacatc ccaaaggcca ttttatgatg gacccatgcc aactccccgg   300
caaaagccat ttcagtcagg ttctacaccg ttgcatctca ctacagatt catggtgtgg   360
aactctattg gaattattcg ctgctataat gatgagcaag acaatgccat agatgtggag   420
ttccatgata cctccataca ccatgcaaca cacttatcaa acactttgaa ttatacaata   480
gcagatcttt cccacgaagc tattttgttg gcatgtgaaa gcactgatga actagcaagc   540
aagcttcaact gcctgcactt tagttcttgg gattcaagca aagagtggat aatagacttg   600
cctcagaatg aggatattga agccatatgt ctcggtcaag gatgggctgc tgccgtact   660
agtgccttgc ttcttcgatt gnttactatt ggaggggttc aaaaagaggt attcagcctt   720
gctggacctg tgggttcaat ggcaggacat ggagaacagc ttttcattgt tatccagagg   780
tccggatttg atggggatca atgccttggg gttcaactgc tagagctggg gaaaaagaaa   840
aaaccaatth tgcatggnga cccttttctt ttacaaggaa atcctac                   887

```

<210> 3298

<211> 799

<212> DNA

<213> Homo sapiens

<400> 3298

```

aaaagggcag ctccggggga aagagggtgg cgtcccgggg aagcccgcag ccgcccgcga   60
tgctcgtggg actcggaagt gccgaaagag ggggtgttggg aactcgcggc gcgcgtgaac   120
gttgccgtcg ccgcccggcg ggacagcccc gagaaactct cagcgtaggc atcggaacc   180

```



分

冊

Separate Volume

出願番号 平成11年特許願第248036号
[ST.10/C] : [JP2000-183767]

分冊番号

3 / 4

出証番号 出証特 2002-3046776

ttcgtgccaa ggagccatgc cgccccgatg ggaactggca ctttacctac ttgcctcact 240
 aggcttccac ttctattcct tctatgaagt ttacaaagtc tccagagaac acgaagagga 300
 gctggaccag gaatttgagc tggagactga cactttatit ggaggattaa agaaggatgc 360
 gaccgacttt gagtggagct tctggatgga atgggggaag cagtggctgg tgtggcttct 420
 ccttggccac atggtagtgt ctcaaattggc cacactgctg gcaagaaagc acagaccctg 480
 gattctcatg ctctatggga tgtgggcctg ctgggtgtgtg ctggggaccc ctgggtgtggc 540
 tatggttttg ctccatacca ccatctcttt ctgcgtggcc cagtccggt ctcagctcct 600
 gacgtggctc tgttctctcc tntcctctc cacactgagg ctgcagggtg tggaagaagt 660
 taagagaagg tggtagaaga cagaaaacga gtactacctg ctgcagttca cgctgaccgc 720
 ttcgctgcct ntactacacc agcttttagc tggagctttt gctggcagca acttgnctgc 780
 tgcacganc ttctacttc 799

<210> 3299

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3299

tccaaagaac tctgctttta aacaaggatg tgaagcgaac atttggatca acctcacaat 60
 caagtagttt ttcaaaaatt cataagcggc cacacagaat acagaaagct cggaaaagca 120
 ttgcccaatc aggtgtaaac atgtgcaatc aaaacagctc tctcataag aatgttacia 180
 ttaaaagcag cgttgaccaa aaacctaat atttccatca agcagcaaaa gaaaagtcta 240
 atgccaaggc aatagccac tatttgtata gacacaaata tgaaaactat aggatgatca 300
 aaaaatcagg tgaatcatat cctgtgcatt tcaaaaaaga agaagctagt tcattaaatt 360
 ctttacacct gttttcatca tcaagtaatt ctcaacaa ttttatttca gaccctcata 420
 agcctgacgc caaaaggcct gaaagcttca aagatcacag acgtgtagct gtaaagagag 480
 taattaagga atctaagaag gaaagtictg ttggagggga agacttggat agctatccag 540
 attttttgca taaaatgact gttgtcgttt tgcaaaaact taattctgct gaaaagaaag 600
 atagttatga aacagaagat gaaagttcct gggataatgt tgagtttaga gactacacta 660

cacaggccat agaagatgaa acctatagtg atattaatca agagcatgta aatttattcc 720
 ctttatttaa gagcaaagtg gaaggcagga gcctggaaaa aatgctactc ttagttatgn 780
 ccaacgatgg ctttattttg atactttgaa natcctggag gtacaacttt tgctgagatc 840
 atganctac 849

<210> 3300

<211> 802

<212> DNA

<213> Homo sapiens

<400> 3300

cttaaggcta aatcctggaa taaaaagttc tatgattatg aagcaaaccat gccagacaga 60
 tggggtcaca gtggttataa agagttatac cctgaagaat ttgaaacaga cagtagtgat 120
 cagcaagata ttaccaacgg gaagaaaaca tctccccagg taaagtcac tacccatgaa 180
 tcccgcacac acaagaagtc aaagaaatcc cacaaaaaaa aagcagaaaa aaaggtcaca 240
 caaaaaacag aagaaaagca aaaaggaagc cacagatata acagcagatt cctcgagtga 300
 gttctcagaa gaaactgggg cttctgggtac aaggaaaggg aaacaaccac ataaacgcaa 360
 gaaaaaatcc aggaaaaagt ctctcaaaaa acctgcttta ttcttagagg cagaaagtaa 420
 cacttcacat tcagatgatt cagcatccag cagttctgag gaaagtgagg aaagagacac 480
 taagaaaacc aaaaggaaaa agagagagaa aaaagcccat acctctgtaa ccaacaatga 540
 aatacaggag aggacaaaca aacgcacaaa ttggaaagta gctacagatg aaaggtctgc 600
 tgagagctca gaggatgact aaatgggaaa cacttttgtt ttccacatga ctgtggatat 660
 ttacagttct tactccttgt ggttttgcag tgactcttgt tcagcacggg gcctgaggtc 720
 anagctgtct tgtgccatct gnatgntctg acagacgtct tggcttctat tttggcgtaa 780
 agcttgatcc ccttttcttg gt 802

<210> 3301

<211> 893

<212> DNA

<213> Homo sapiens

<400> 3301

```

ccgagcgggc tgggggaggg gagcgtgggg ccgacagttt tgggggtgaa aaggcaaaag   60
gcggggtgaaa ggctgcctcc cgagactctc cttgcttgga attctgcca ctctgcggag  120
ttagcagtca cgacctccag cacaggatgt ggtaccacag attgtccac ctacacagca  180
ggcttcagga cttgctgaag ggaggagtca tatatccggc cttccacag cccaacttca  240
aaagcttact tcctttagct gtccattggc accatacagc ctccaagtct ctgacttgtg  300
cttggcagca acatgaagat cattttgagc tgaaatatgc taataccgtg atgcgctttg  360
attacgtctg gcttcgagac cactgccgct cagcatcgtg ctacaactct aagactcacc  420
agcgcagcct ggatactgcc agtgtggatt tatgtatcaa gccaaagacc attcgtctgg  480
atgagaccac actctttttc acttggccag atggatcatgt gactaaatat gatttgaatt  540
ggctggtgaa aaacagctat gaagggcaga aacaaaaagt catccagcct agaatactat  600
ggaatgctga aatctaccag caagcccaag ttccatcgtt agattgccag agcttcttag  660
aaaccaacga gggactgaag aagtttctgc aaaactttct gctctatgga attgcattcg  720
tagaaaatgt cccttccact caagacacac agagaanttgc gcagaaagga tcancttaat  780
cagagaaacc atttatggga ggatgtggga tttcacttta aaacttnttc cagaggtgac  840
actgggtaca cccaagctag ctctggatcg ggacacttgn cctacctatt tna          893

```

<210> 3302

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3302

```

actattccat attattaaaa agaaaaaaaa aaagccaaaa agaaaaaaaa aaaaaaagca   60
agccacctct ctctttcttt tcttgctctc ttttctttc tctctctctc aagtttgtgc  120
agggagatgg tgaactgttt tgtcagaact taaatggaaa aaaaaataaa actacaacaa  180
gcctaccttt tataactggg tgtttagtgc taaacagcca gaaccacaga gacagtattg  240

```

tatgacaaa gcatttgatg ccaaaatttg acgttaaagt aatgatttga tttcctgccc 300
 tggttttgaa ggtccatttt tttccctttt gcattgactt gcttgtttcc cctttgaaac 360
 acctaaaaat acctttccaa aacatcgca gagcatacat agacaaaaat gaaatagaaa 420
 gctcttgcat gcttgagtcc accattgggg gaaatgacag aaaactggac ctgagggcat 480
 taggaacatc ctacagagtt gtgttttagtg tcgtttgcca tggattttca cagtgaaca 540
 tggatactct ccacacatca tttacttcat gctgtgtact tatgtactgg tttttgcatt 600
 ttactcactt gataagtctg ctccactggg ttcactcagat agacttgctg ctactggctt 660
 ttccattgta gattgggtta ttttacacgc agttcgccaa atgggattgc tctgtatagt 720
 caaattgggtg atggacagat ggacagaatg cagangtaca tagatgagct gangctgatc 780
 cancttcctt gaaattcaaa gtgtaacttt gta 813

<210> 3303

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3303

gagtgcgccg tgcggtctcc ggacgctcgc tgctcagccc gatccccgcc aactgtgcag 60
 gcggctgacc cgcagcggtta gcggcagcag cgaggactcg agcgctggct gcagcgacac 120
 catggatctc tcctttatgg ccgcgcagct gcccatgatg gggggagctt tcatggactc 180
 gcccacgag gacttcagca ccgagtactc cctgtttaac tcctctgcca atgtccacgc 240
 ggctgccaat ggccagggcc agccggaaga tcctcctcgg tcctccaacg acgccgtctt 300
 gctatggatt gccatcatag ctacgctggg gaacatcgtg gtggtgggcg tgggtgatgc 360
 cttcaccttc tgaggacggc acaccctgca ccaccatggg gtgaggcttg gcacgtagct 420
 ctgacttgct gtcggccttt ggcttctcct gtgttctaga accaggagtt ttgaccaggg 480
 gcggcggccg tccttctgga atttctcccc agcagccctg atttcaaata tcccatgttg 540
 tggatcaagct gagtcagaag acatggaagt atgggcctcc tgcccctaga ggcatgacgg 600
 ggcaaggcct tcagagggca gattggggat ccttgaaact acattccang aacatgggac 660
 cagatgagac agctagttaa gtttaaaaca tagacatgat ttgatgatcg cttgcttgtg 720

gtaaataatc actcngtgn cttggtttta tgcaaactta tcgaacctta nggc 774

<210> 3304

<211> 765

<212> DNA

<213> Homo sapiens

<400> 3304

aagatggcgg cgggtggctgg atctggggct gccgcggctc cgagctcact gctcctcgtg 60
gtgggcagcg agttcgggag cccggggctc ctcacctacg tcctggagga gctcgaaaga 120
ggcatccggt cttgggatgt cgatcctggc gtctgcaacc ttgatgaaca gctcaaggtc 180
tttgtgtccc gacactctgc cacccttctcc agcattgtga aaggccagcg gaggctgcac 240
caccgtggag acaacctgga gaccctggtc ctctgaacc catcagacaa gtccctgtat 300
gatgagctcc ggaaccttct gttggacctt gcctctcaca agctactggg gttggctggg 360
ctctgcctgg aggagacggg ggagctgctg ctacagacag ggggcttctc gcctcaccac 420
ttcctccagg tcctgaagga cagagagatc cgggacatcc tggccaccac gccccacct 480
gtgcagccgc ccatactcac catcacctgc cccaccttcg gtgactgggc tcagccggca 540
cccgtgtgct ctggccttca gggggcgctc cggtccagc tgcggctgaa cccccggcg 600
cagctgccc aactctgagg cctgtgcgaa ttctggagt acgtggctga gtctctggag 660
ccaccgtccc ccttcgagct gctggagccc ccgaccttcg ggggcttctc nagctgggcc 720
ggcctgctgc tacatcttnc ctggagcctc gggatccgct tcttc 765

<210> 3305

<211> 884

<212> DNA

<213> Homo sapiens

<400> 3305

atagcacttt taggaaactg attattgtaa atgtttaatt ttgtctcaaa tatagttggc 60

attggaagtt tagcctttac ttgaatgtat actgtagatt ttttaacaaag cgagttctat 120
 atttattatg tttagtgtgg tttgaaatta cctcttticat atgtttttaa taaagtgaag 180
 tttatgtatg ttttgtacat agatacacat gattatgtta agaggcttta agatttaaaa 240
 gtttcacaca accataagta tagtatttca tgccagtaaa attttttttag tgggtattctg 300
 tttacagatg tattaggacc attgatgcat tacatttaag aattctcttt aatacatctg 360
 ggcaataaat attgaaaggt attccatgaa gctgagttct ttagataatc aacattacta 420
 acattacatt tttgagattt ttatgacatt agattttttat tttgtatatg tagaatatta 480
 taattttttaa aaggactatt gatgatagaa gaataggggc aagacgacaa aagtaccttt 540
 gaataaaaca atttaagaaa ttggtttaag atattggatg atagaagaca ttttaagatat 600
 ctagatgggtg atattttcct tacaagatgg gtaccagtat agtaatatct gtataactaac 660
 tagggctttg tattgtcaat aattttttta taatttttta atgaggtatt taccactgaa 720
 gaaatatgat aatgtaaaac catcaaattt tataattgag atgatactct ggaaaaacat 780
 gtcatttcat tttcagaaaa ctcttaagct ctcttcagtc tctgtaaggt tctgaatgca 840
 tgttcttcat gaaaagtatg tgggtggttg aagtaataat aata 884

<210> 3306

<211> 708

<212> DNA

<213> Homo sapiens

<400> 3306

acaaaagtaa ctatgtttcc ggtagcccct aaaccccagg attccagtca accatcagac 60
 agactcatga ctgaaaaaca gcnggaagaa gcagaatggg aaagcataaa tgtgctattg 120
 atgatgcatg gcttaaaacc tttgtctcta gtcaaaagaa cagacanaga tctcatcatt 180
 tttgacaaac agtcatcaca aaggatgaga cagaattaga aattgntggg ggaagaaaca 240
 tnatgtcaac agaacatgat acaggagctt atagaaacta atcaacagct tagaaatgaa 300
 cttcagctag agcaaagccg agcagccaat caagaacaac gagctaata cttggaacaa 360
 attatggaaa gtgtgaaatc caaaattggg gaattggagg atgaatcact aagtagggct 420
 tgccaccaac agaattaaat gaangatctt caaaaggagc agaaaacttt acaggtgaag 480

tgccagcatt ataagaaaaa acgaacggag cangaagaaa ctattgcttc ttgcaaattg 540
gaagtctgta gattaaaaaa ggaggaagaa gatcgattg tcactcaaaa cagagtgttt 600
gcctatctgt gcaaaagagt tcctcatccg tcttgatag acagttgctt tggctaattg 660
attactatga atctaanatt tgaaaaattc atacnccaag gcantatt 708

<210> 3307

<211> 844

<212> DNA

<213> Homo sapiens

<400> 3307

tacgtgatgg ttttacagcc cgaggagccc aagatcagcc tgagtggcgt ccaccatttt 60
gcccgagcag cttctgaatt tgaaagctca gaaggggtgt tccttttccc tgagcttcgc 120
atcatcagca ccatcacgag agaagtggag cctgaagggg acggggctga ggaccccaca 180
gttcaagaat cactgttgct cgaggagatc gtgcacgacc tggataacctg tgaggtcacg 240
gtggagggag aggagctgaa ccacgagcag gagagcctgg aggtggacat ggcccgcctg 300
cagcagaagg gcattgaagt gagcagctct gaactgggca tgaccttcac aggcgtggac 360
accatggcca gctacgagga ggttttgcac ctgctgcgt atcggaactg gcatgccagg 420
tccttgcttg accggaagtt taagctcatc tgctcagagc tgaatggccg ctatatcagc 480
aacgaattta aggtggaggt gaatgtaatc cacacggcca accccatgga acacgccaac 540
cacatggctg cccagccaca gtctgtgcac ccggaacacc gctcctttgt tgacctgtca 600
ggccacaacc tggccaaccc ccacccgttc gcagtcgtcc ccagcactgc gacagttgtg 660
atcgtggtgt gcgtcagctt cctggtgttc atgattatcc tgggggtatt tcggatccng 720
gcccggacat cggcggacca tgcgggatca ggacaccggg aaggagaacg agatggactg 780
ggacacntg ccctgaccat naccgtcaac cccatggaga cctatgagga ccagcacaca 840
ntga 844

<210> 3308

<211> 697

<212> DNA

<213> Homo sapiens

<400> 3308

```
acttccgccc caggtacgct aggccgcggc cttcgttcct cccagaaagg agatggtgac 60
attcaaggat gttgctgngg ncttactga ggaggagctg gggctgctgg actctgtcca 120
gaggaagctg taccgagatg tgatgctgga gaacttcagg aacctgctct tagtancaca 180
tcagcccttc aagccagacc taatatccca gctggagaga gaagaaaagc ttttgatggt 240
ggagacagaa accccaaggg atggatgttc aggaaggaag aatcaacana agatggagag 300
tattcaggaa gtaacagtaa gctacttttc ccccaaagag ctttctccc gtcagacctg 360
gcaacaaagt gcangtgggt taatcagggt tcaagatttc ctgaaagttt ttcaaggga 420
gaattctcag ttgcaagaac aaggtaattc cctcgccag gtttgggcag gaataccagt 480
tcagatttct gaagataaga actatatatt gactcatata gggaatggct ccaattatat 540
aaaaagtcaa gggatatccat ctggagggc acatcattct tggaggaaaa tgtatctgaa 600
agagtcacat aattatcagt gtagatgtca gcaaatttcc atgaaaaatc atttctgtaa 660
gtgtgacagt gtcagntggc tntnacatca caatgat 697
```

<210> 3309

<211> 770

<212> DNA

<213> Homo sapiens

<400> 3309

```
aaactacaac gaaaaaagac agagctcata atggatgcta tccataaaca aaagagctta 60
caattcaaga aaaccatgga tgcaaagaag aactatgagc agaaatgccg ggacaaagat 120
gaggcagaac aggccgtcag ccggagtgcc aacctggtga acccgaagca acaagaaaag 180
ctttttgtga aactggcaac ttcaaagacc gcagtagagg actcagacaa agcatacatg 240
ctgcacatcg gcaccctgga taaggctcga gaagagtggc agagtgagca catcaaggcc 300
tgcgaggcat ttgaggctca agaatgtgaa cgaataaact tcttccgaa tgcattgtgg 360
```

ttacatgtga atcagctgtc acaacaatgt gtcaccagtg atgaaatgta cgaacaagtc 420
 cgaaagagtt tagaaatgtg cagcattcag aggacattg aatactttgt gaatcaacgc 480
 aaaactggac agattccacc agcaccatc atgcatgaga atttctactc ctcccagaag 540
 aatgcagtcc cagcaggaaa ggctacaggg cctaacttgg caaggagagg accccttcca 600
 attcctaaaa gctnaccaga tgatcccaat tactctttgg ttgatgacta cagtttgctc 660
 tatcagtaaa atcaatgaaa ccagagcttt ttccggtagt gcttctggga tattggaang 720
 gcncagaca caggcctata gccacgtttt ttanccatgg aaactttgaa 770

<210> 3310

<211> 865

<212> DNA

<213> Homo sapiens

<400> 3310

tagaaaatgc cactcctcgg gggaagtcca gaatggcaag atgtccacca acggtgtgtc 60
 caacggtgtg tccaatggcc tgcaccttca tagcaatggc ttccggctgc cggagagtag 120
 gggacatgtc agcccccaag tagagctacc accatacctg gagcgtgtga aacagcaagc 180
 caatgaggct tttgcctgcc agcagtggac ccaagccatt cagctttaca gcaaggctgt 240
 gcagagggcc cctcacaatg ccatgcttta tggaaaccga gcagcagcct acatgaagcg 300
 caagtgggat ggtgaccact atgatgccct gagggactgc ctcaaggcca tctccctaaa 360
 cccatgccac ctgaaggcac actttcgcct ggcccgtgc ctctttgagc tcaagtatgt 420
 ggctgaagcc ctggagtgcc tggacgactt caaagggaaa ttccggagc aggcccacag 480
 cagcgtttgt gatgcattgg gccgcgacat cacagctgcc ctcttctcta aaaatgatgg 540
 tgaggagaag aagggacctg gtggcggcgc cccagtccgc ctccgcagca cgagccgcaa 600
 ggactccatc tcagaggatg aaatggtgct gcgggagcga agctacgact atcagtttcc 660
 gctactgceg nactgcaac accaccacgg atatcaaaga ngccaatttc tttggcagca 720
 acgctcagta tatcgagtg gctntgacga tggtccttc ttcatctggg aaaaggagac 780
 cccaacctgg tccgtgtgct tccaagggga ttaagtccat tggnaactgc ttgaanccca 840
 ccccanttct ggttctgggc accaa 865

<210> 3311

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3311

```

catagctcac tgcctcctcg aactcctggg ctcaagcgat cttcccaccc cagcctcccg   60
aggagctgag actacaggcg cgcgccacta ctcccggcta attgttcaat atttttgttg  120
aaacagggat cttgctatgt tcctatgggt gtcttgagct ccttagcctc ctaaagtgtt  180
ggtatcacag gcgtgagcca ctgtgcccgg cgtaacaat cttctgcccc agggtcggcc  240
acagttggac aggagcacc cgcctcccct gtagcattcg tccccgtgcc cggagttaac  300
tcctggacga cgtacacctg ctgcactgct ggatatagcc attcttcatt ttccctcct  360
ccaccacca tgtacacccc atcagcaagt cccatccgat ataccacta catacatctg  420
ccagctgttc ccctctccac ccacaccccg gcctccagca tctgtctgga ctgctgcggc  480
agatcctcac tggtttctct gcttccactc tcgcccttcc ectaggtcca ttctccacgt  540
agcagccaag gggattctta tatttattta ttatttaatt tagttttaga gacagggtct  600
tgtcctgatg cccaggctgg agtacagtgg catgatcata gctcactgtg gcttcaacct  660
cttgggctca agtgatcctn ctgcctcagc tcctgagtag ctgggactac aggtgtgcac  720
caccacacct angtatntnt atttatttat tttttg   756

```

<210> 3312

<211> 916

<212> DNA

<213> Homo sapiens

<400> 3312

```

tacaaaatgc tgggatttac caaccacatc aatccagcca tggactttac ccagactcct   60
cctggaatgc tggccttgga caacatgctg tacttggtta aagtccacca ggacacctac  120

```

atccggattg tcttgagaa cagtagccgg gaagacaaac atgaatgccc ctttgccgc 180
 agtgccattg agctcaccaa aatgctctgt gaaatcctgc aggttgggga actaccaa 240
 gaaggacgca atgactacca ccgatgttc ttacccatg accgagcctt tgaagagctc 300
 tttggaatct gcatccagct gttgaacaag acctggaagg agatgagggc aacagcagag 360
 gacttcaaca aggttatgca agtcgtccga gagcaaatca ctcgagcttt gccctccaaa 420
 cccaactctt tggatcagtt caagagcaaa ttgcgtagcc tgagttactc tgagattcta 480
 cgactgcgcc agtctgagag gatgagtcag gatgacttcc agtccccgcc aattgtggag 540
 ctgagggaga agatccagcc cgagatcctt gagctgatca agcagcagcg cctgaaccgg 600
 ctctgtgagg gcagcagctt ccgaaagatt gggaaccgcc gaaggcaaga acggttctgg 660
 tactgccgtt tggcactgaa ccacaaggtc cttcactaig gtgacttgga tgacaacca 720
 caaggggang tgacatttga atccctgcag gagaaaattc ctggtgcana cattaanggc 780
 attggcactg ggaaagattg tccccacatt gaaagagaaa aagtgttnt gaaacagaac 840
 aaggagggtg tgggaaatgg gctttttcaa tccgggntga accctgntga ggaccttta 900
 ctttattgga cctaaa 916

<210> 3313

<211> 809

<212> DNA

<213> Homo sapiens

<400> 3313

gaatgtaaag agatccaggg ctcttgagaa gggacaagtg agagccagcc aaaaaggaaa 60
 aagcaaaggc agaaacggca tcaggagaga cagagatgtg aaggaggga ggagcaggag 120
 agcaggaagg aaacgcagga ggaggagca gcatctcctg tgaacacaga ggagcacctg 180
 tttgctgtta aaatcgatct ccctcggcac cctgagcaat ggatataata tttggcagga 240
 ataggaaaga acagctggag cctgtgaggg ccaaagtac aggcaagatt ccagcatggc 300
 tgcagggaac cctgctccgc aatgggcctg ggatgcacac agttggggag tccagataca 360
 accattgggt cgacggcctt gccctgctcc acagcttcac catcagagac ggtgaagtct 420
 attacaggag caaatacctg agaagcgata cctacaacac caatattgag gcaaacagga 480

ttgtggtgtc tgagtttga acaatggcct atccggaccc ctgcaaaaac atattttcca 540
aagctttctc ctacttgtct cacaccatcc ccgatttcac agacaactgc ctgatcaaca 600
tcatgaagtg cggagaagac ttctacgcga cctcagagac caattacatc aggaaaatca 660
acccacagac tctggaaacc ctggagaagg ttgattatcg taaatacgtg gcggtaaate 720
ttggcaacgt cacatnccca ttatgatgaa gctggaaatg ttctaaacat gggccccatt 780
canttggggg aaaangggga agaccaaatt 809

<210> 3314

<211> 863

<212> DNA

<213> Homo sapiens

<400> 3314

ttattttgct ttattcagag agaaagttga ttactgagtg ctgaattata caatttaggc 60
taggaaactc gtaactttgg tatttaataa aagaaactat acatattctg tttgtaatgt 120
aaataatcta taccatgc acaaatatct gtttctggg tgtgatatat taaagtatgt 180
attcttattt tgaggtatct tttggaaata attgaaagag attaaataac aatttatgcc 240
acatgaaaaa taattactta gaagtagtta ggtatcatgt cttatggctt tttatgttcc 300
atatttgctt tttttctcat ttgctttatt actatatgta cttgcatgta acagtttgta 360
agcatatatt ctgacttatt ttccttctgt cattatctag tgctgttatg ccttcctatc 420
agaatcgata agtcaaactc agaggtgtga ttttgggtgtt gaagttttca ggacagagat 480
actattttcca tggatgcatt ttaagtaata aaattagggg aagtgaatc agaaaatgaa 540
aaatgattac aaaataactt tcaggttttc tataatcaat ggctttaaaa agtagacagt 600
cttaattaat tttaaattag cttgctcaga aaggatcatgc catacagncc tatcataaaa 660
ggaacactat aagaattaag caatgaacag catgatttct gatccccagt gaggactgac 720
agngtataaa agatacangt atgctactgg atgtaccga taattgttg agagtttcta 780
gtgaaaaact caaatattgc tagcttaacc acagtagtag ggggcaacct tattatatgg 840
gagagcttca aaacatactg tcc 863

<210> 3315

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3315

```
gtatTTTTtc agtaagcacc cagaggcctc cattcaggct gtttttttca gatgcccaaa 60
tgcatatTTtg ggcattagaa ggtctgtcgc acttagtagc agcatcattt acagaggata 120
gatttggagt tgtccagacg aactaccag ctatccttaa tactttgttg aactgcaag 180
aggcagtcga caagtacttt aagcttcctc atgcttcag taaaccaccc cggatttcag 240
gaagccttgt ggacacttca tataaaacat taagatttgc attcagagca tactgaaaa 300
ctgccatcta tcgaataact actacatttg gtgaacatct gaatgctgtg caagcatctg 360
cagaacatca gaaaagactt caacagttct tggagttcaa agaatagtta agtaatataa 420
actgtgttca ttacactgct gatacaacta cagatgggac agtaaagtgt cagcattctt 480
ggatcagaag aaaacggact aattagatgc ttcctttgtc gtggtggttg ctttgaaaac 540
tatactttaa tgggagaaat catggaaaga aattctcaac agaataactg aaaactgcct 600
tttctgtacc gattgctttt tgtgtgtgtg gtataataaa atctttattc aattttacag 660
aagcattgat ggcagtcgaa atgtctctag ctcatataac ttaataggna ataactaaaa 720
aacttttaga atttactttt gaaangangg gaaccggttc tgaaatgagt atagggtgat 780
tcatag 786
```

<210> 3316

<211> 662

<212> DNA

<213> Homo sapiens

<400> 3316

```
gcactgtgct gcctgtggcc accatccaga acgccagtac tgccatgctg atggcagcca 60
gtgtggctcg caaggctgtg gtgctgcctg gggggactgc caccagccct aagatgattg 120
```

ctgagaacgt gctaggcctg gtgccccaaag ccctgcctaa ggctgacggg cgggcagggc 180
 tggggactgg gggacagaat gtgaatgggt cctcgggtgt gatgggtgcaa ctttcaaaga 240
 cagntactgg gccaagtaca gggggcggca catngatata acggacccag tccagcctgg 300
 tggaggcctt caacaagata ctcaacagca agaacctgct ccctgcctat gggccaaacc 360
 tganccacc agctgaggct gggctggccc tgccttcac cggctaccgc tgcctggagt 420
 gtgggatgc cttctcattg gagaagagcc tggcacgna ctatgaccgt cggagcatgc 480
 gcatcgaggc cacctgcaac cactgcgccc gccgcctggt cttcttcaac aagtgcagcc 540
 tgctcctgca tgcacgtgaa cacaatgaca aggggctcgn catgcagtgc tcacatttgg 600
 tcatgaggct gtacccttga ccagatgggt ggggcanenc ggacattaca ccgatgctgc 660
 ct 662

<210> 3317

<211> 824

<212> DNA

<213> Homo sapiens

<400> 3317

attaaggaaa ttcaagtccc atataatgtc cagtggatgg caatcttcag tgaacaactc 60
 tgtgtgggat tccagtcagg atttctaaga tacccttga atggagaagg aaatccatac 120
 agtatgctcc attcaaata ccatacacta tcatttattg cacatcaacc aatggatgct 180
 atctgcgcag ttgagatctc cagtaaagaa tatctgctgt gttttaacag cattgggata 240
 tacactgact gccagggccg aagatctaga caacaggaat tgatgtggcc agcaaatcct 300
 tcctcttgtt gttacaatgc accatatctc tcggtgtaca gtgaaaatgc agttgatata 360
 tttgatgtga actccatgga atggattcag actcttcctc tcaaaaaggt tcgaccctta 420
 aacaatgaag gatcattaaa tcttttaggg ttggagacca ttagattaat atatttcaaa 480
 aataagatgg cagaagggga cgaactggta gtacctgaaa catcagataa tagtcggaaa 540
 caaatgggta gaaacattaa caataagcgg cgttattcct tcagagtccc agaagaggaa 600
 aggatgcagc agaggaggga aatgctacga gatccagaaa tgagaaataa attaatttct 660
 aatccaacta attttaatca catagcacac atgggtcctg gagatggaat acagatcctg 720

aaagatctgc ccatgaaccc tcggcctcag gaaagtcgga cagtattcaa tggctcaagt 780
cagtattcca tctatcacc aaatnccgnc ctgagccang cccg 824

<210> 3318

<211> 725

<212> DNA

<213> Homo sapiens

<400> 3318

agncccggct tggaactgaa ctgtgtgagc acgggtcctg gaacccgggc ccagaaccgg 60
cgagcccagg tctgagccca gagctcagcg gtcagcctcg taggccctga ctcggaatcg 120
agccgaggcg ctgaggttgg agccggagag cgtgagagcc gaagagcagg gagggcgggc 180
cggctgcgcg tccgacgagt cgagagcag gaccgcggaa ggcagggaga cggccgcaag 240
cccagggcag agggcagagg gcagagagcg gcctggctcg gcggagaggg cgccgcccgg 300
ccggaacca gctcgccgcc cgggacggcg ggccccgtgg ggcgcggacc cagggtggcc 360
gtgggtccgc agcgactccc cggccgacgg cggggggcgt gccccctccc agcccagcct 420
ccccaacccg gcccgcccgc cgcgtcgcgg gggcatgtga gcgggaagcc taggctgcca 480
gccgcgagga ccgcacggag gaggagcagg agcgcggagc cgcgagcccc gagccccgag 540
cccggcgcct ggctgagtag actgtagctc tccanagggt aatgggtccc cagaacccaa 600
gagaccagga gtgtcggagg ctgcctctgg aagccaggag aactggactt caaccgaaat 660
ttgaaagaag tggtnccagc cattgagaan ctgtttgtcc antgacttgg aaaggagaag 720
gttct 725

<210> 3319

<211> 864

<212> DNA

<213> Homo sapiens

<400> 3319

ccccttgggt cccaccctcc ctcaaggcct cctccacctc cacctccacc ccgcctggcc 60
 tggcgctccac ctctgcggct cctacctggg tgcaatcgag tttaatggct gataagcaga 120
 tcagcctgcc agccaagctc atcaatggcg gcatcgccgg gctgatcggt gtcacctgcg 180
 tgtttcccat cgacctggcc aagaccaggc tgcagaacca gcagaacggc cagcgcggtgt 240
 acacgagcat gtccgactgc ctcatcaaga ccgtccgctc cgagggctac ttcggcatgt 300
 accggggagc tgctgtgaac ttgaccctcg tcacccccga gaaggccatc aagctggcag 360
 ccaacgactt cttccgacat cagctctcta aggacgggca gaagctgacc ctgcttaaag 420
 agatgctggc gggctgtggg gctggcacct gccaggtgat cgtgaccacg cccatggaga 480
 tgctgaagat ccagctgcag gatgcagggc gcattgccgc ccagaggaag atcctggctg 540
 cccagggccca gctctcgcc caggggggtg cccagccctc agtggaggct ccagctgccc 600
 ctcgccccac ggnacccag ctgaccgcg acctgctgcg gagccgtggc attgccggtc 660
 tctacaaggg actcggggcc acgctgctaa ggatgtccct tctctgtggt gtacttccgt 720
 ctttgcaact gaaccagtgg gccgnccggc gtncgaagag aatcgcttct acgtgtcttc 780
 tggccgctgt gtggttgat gccgccgttg tggccgtaac cctggatgtg tgaanaccgg 840
 ttcatccttc accagngtna cgag 864

<210> 3320

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3320

gangatngtg atccggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca 60
 gggccggccg ttcgtggagg agtacatccc cacacaggag atccaggta ccagcatcca 120
 ctggagctac aagaccacgg atgacatcgt gaaggttgaa gtctgggatg tagtagacaa 180
 aggaaaatgc aaaaagcgag gcgacggctt aaagatggag aacgaccccc aggaggcgga 240
 gtctgaaatg gccctggatg ctgagttcct ggacgtgtgc aagaactgca acggggtggt 300
 catgatgttc gacattacca agcagtggac cttaattac attctccggg agcttccaaa 360
 agtgcaccac cacgtgccag tgtgcgtgct gggaaactac cgggacatgg gcgagcaccg 420

agtcacccctg ccggacgacg tgcgtgactt catcgacaac ctggacagca gacctccagg 480
 ttctctctac ttccgctatg ctgagtcctt catgaagaac agcttcggcc taaagtacct 540
 tcataagttc ttcaatatcc catttttgca gcttcaggta agcactcacc acgtggggtg 600
 gagtggctgc tggctctctca cctccttcca ggtgtctcct gtgtagcaac gggctctcct 660
 nctaaccct gagaaaggct gtgggacctg ctngagatt ggctgctggc aaggggcccc 720
 gcgttcttac ttgcacctgc ctgcttcttg ggtnggcaag aagggtacag gggctcctga 780
 agggcttaga cccaantcc caaggaagcc cctccaacc tttttgcng ggggaacccc 840

<210> 3321

<211> 776

<212> DNA

<213> Homo sapiens

<400> 3321

gaagattctg aagctgtggg gatctccagc attatcagca acctgataac cgtgttccca 60
 cgaaatgttt taactgccat tccaagtga cttttctcct cttttgttaa ctgcctcaca 120
 cacctcactt gttcttttgg gcgaagtgtt gcattggaag aagtgttga taaagatgac 180
 atggtataca tggagcata tgataaattg ttggagtcct ggttaacttt ggttcaagat 240
 gacaaacatt tccataaagg cttttttacc caacatgcag ttcaagtttt caattcctat 300
 attcagtgcc acctagctgc tccagatggc acaagaaatt tgactgcca tggtgtggcc 360
 tctcgtgagg aggaagaaat aagtgaactt caagaggatg atcgagacca gttttctgat 420
 caactggcca gtgtaggaat gctaggaaga attgctgcag aacactgtat acctcttctg 480
 acaagtttat tagaagaaag agtaacaaga ctccatggtc agtcacaacg acatcagcaa 540
 cagttacttg cttcaccggg ttcaagcact gttgacaaca aaatgcttga tgatctctat 600
 gaagatattc actggcttat tttagttaca ggctacctct tagctgatga tactcaggga 660
 gagactccgc taatacctnc agaaataatg gaatattcca ttaagcattc atctgaagtt 720
 gcctttattc caccctttaa attttgggaa cttccggaaa aaangntttt ttcctt 776

<210> 3322

<211> 697

<212> DNA

<213> Homo sapiens

<400> 3322

```

cgggtgctcga ggCggagggg aggaggcggg gaaggcgaaa ggaggggttc ggaggagagg 60
gttcgatctc cgtacgcacc aggtggagag cgcgcgcttg gggaaggagg cgtgtcgagt 120
agcgggaggg aagttgtagt acgggtgggg agaaccacac taaagggaga tgggggtgag 180
cagttaagga accgcgagag cgccaggtag agagctgccc ttaatggggg aacctggaga 240
agagtgtgag cgtagtgggg aagaaggag aagacaaata ggttcgggaa tgtgtctccg 300
agggcgcgag cgggcgctag gaccgcgct cgaaaagatg aggctttggg gctgtcgggg 360
cgcgcgctcc cgttggtgac gcgggggtgg cggaggtctc cggccgggac gaagccccgc 420
agggagtgga tactcgacag cttcggcct ccgctcgctt ctccctgcgc gctttcctgc 480
tcccccttcc ggctacagcc ctggggtcga gctctggtcg aagcgcatc cgcctctcct 540
ttggccctgc ggcttccttt gcaacccgcc gccacccttg ctctccgtgg ttacccttg 600
ggctctgagg cctggtggta gcggccactg ccgcggattg ctgttgcgga cccggggcgg 660
ggcangtgga aaagctcgnt cttcncgggt ttcgttg 697

```

<210> 3323

<211> 760

<212> DNA

<213> Homo sapiens

<400> 3323

```

atcgcagcgt cggatgttca gagcagcaga agccggcgtc gtcggatgtt gtgttgcccg 60
ccaccatgag ctacacaggc tttgtccagg gatctgaaac cactttgcag tcgacatact 120
cggataccag cgctcagccc acctgtgatt atggatatgg aacttggaac tctgggacaa 180
atagaggcta cgagggtat ggctatggct atggctatgg ccaggataac accaccaact 240
atgggtatgg tatggccact tcacactctt gggaaatgcc tagctctgac acaaatgcaa 300

```

acactagtgc ctcgggtagc gccagtgccg attccgtttt atccagaatt aaccagcgct 360
tagatatggt gccgcatttg gagacagaca tgatgcaagg aggcgtgtac ggctcaggtg 420
gagaaaggta tgactcttat gagtcctgcg actcgagggc cgtcctgagt gagcgcgacc 480
tgtaccggtc aggctatgac tacagcgagc ttgaccctga gatggaaatg gcctatgagg 540
gccaatacga tgcctaccgc gaccagttcc gcatgcgtgg caacgacacc ttcgggtcca 600
gggcacaggg ctgggccgg gatgcccggg gcggccggcc aatggcctca gctatgggcg 660
catgtgggaa gaccccatgg gggcccgggg ccagtgcagc tctgggtgcct ntcggctgcc 720
ttcctttttt ccagaacatn atncccgagt accggatggt 760

<210> 3324

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3324

gattatcagc tgccaaaatg gtatattact tagatccttc tagtcagaag cgagctatag 60
agttggcaac aacacttgat gaatctctca ctaacagaaa cctccagaca tgtatggagg 120
tattggaagc cttgtatgat ggtagcctag gagactgtaa agaagctgct gaaatttata 180
gagcaaattg tcataagctt ttcccttatg ctttggcttt catgcctcct ggatatgaag 240
aggatatgaa gatcacagtt aatggagata gttctgcaga agctgaagaa ctggccaatg 300
aaatttgaac atcactaaac aagcaaatgg aatgactttg gaccatatct agtatataat 360
atTTTTgtca cgcacctgct gcattgctct aacttacaca gaatgagagg agtaaatggt 420
cttgccttca aatagtgttt tacgtttttt atcctgctga aaaagtatat ataaaatata 480
taacattaca ggatagaggt tcagtttctt aaaaaattaa agctgctaaa attgagtggg 540
taaaaaagat acctatcct attcctcccc acccaccat gtttttaaac taatttatat 600
aaaatctgga ggctgttaca gctaacaaag caggtgtgtg gcagaaatat tactttaaat 660
ttgtcttgtg agattttact atatctcaga cagcataaat gctgggttag cactggattc 720
tttactgag cacaaagagt tgntggggct ttagcatctg actggatttg gtacngggnt 780
gattcttacc 790

<210> 3325

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3325

```

caggaaagag taggaaactt tttggcagac ttttacctgg tgaatggact tgttttagaa 60
tcaaggaaaa gaagagaaca ttcagtga gaggatattc ttcgaaataa ggccatcatg 120
gagagtttga gtaaagggtg aaacataatg gaacagaatt ttgagccgat tcgaagacag 180
tctcttacac ctctctctca gaacactatt acatgggaag aatataatc tgctgaaaat 240
ggaaaagctc ctcatctggg tagagaattg gtgtgcaaag agagtaagaa aacgttttaa 300
gctacgatag ccatgagcca ggaatttccc ttagggatag agttattatt gaatgtttta 360
gaagtagtag ctcccttcaa gcactttaac aagcttagag aatttggtca gatgaagctt 420
cctccaggct ttcctgtaaa attagatata cctgtgtttc ccacaatcac agccactgtg 480
acttttcagg agtttcgata cgatgaattt gatggctcca tctttactat acctgatgac 540
tacaaggaag acccaagccg ttttcctgat cttaactga cgtggaaaag gatgccgtct 600
aaccaaggaa agaaaataca gagaccctag aagtggatcc aaatagaagg gacaagtgtc 660
ttcagtgaag aaaagggaat tacacattga atcgacacat cagtaatacg atacagtga 720
atgggcctct aataagaatt tcaccgagtt ttctgatgtg ccattttttg gcttttaaaa 780
atntcntntt ataaatg 797

```

<210> 3326

<211> 822

<212> DNA

<213> Homo sapiens

<400> 3326

```

gagtcctccc cgcctcgcag agttgggaga aggcagggtg gggggtgtgg aaaaataaaa 60

```

ggaaaagtcc ttgcaccatg tagatcagcg tccccactt tggcatcccg gccggccggg 120
 gacctcccag tctgcggcca tgaacgcgag cagcgagggc gagagcttcg cgggctcggg 180
 gcaaattcca ggtggcaca cgggtgctggg ggagctgact cccgacatcc atatctgcgg 240
 catctgcaag cagcagttta acaacctgga tgcctttgta gtcacaagc aaagtggctg 300
 ccagctgaca ggcacatccg cagcagcccc cagcacgggc cagtttgtat cggaggaaac 360
 agtgcctgcc acccagactc agaccaccac cagaaccatc acctcggaga cccagacaat 420
 cacagtttca gctccagaat ttgtttttga acatggctat caaacttacc tgcccacgga 480
 aagtaatgaa aaccagacag ccactgtcat ctctctccct gccaaagtcac gcacaaaaa 540
 gccacaaca ccacctgctc agaaaaggct taactgttgc tatccagggt gccaatcaa 600
 gactgcttat ggcatgaagg acatggagcg gcatttaaaa attcacacgg gagacaaacc 660
 ccataagtgt gaagtctgtg gcaagtgcct tagcccggaa agacaagctt gaaaactaca 720
 tgcgggtgcca cacgggcgtg aagccctaca agtgnagac gtgtgacttc nccgttgccg 780
 acagcaacag ctnaacagca ccctgaggat ccactcggac ca 822

<210> 3327

<211> 660

<212> DNA

<213> Homo sapiens

<400> 3327

agagccgcgg gatttgcggc cgccgccatg ccgtcgtccc cgctgcgggt ggcggtggtg 60
 tgctcgagca accagaaccg gagcatggag gcgcacaaca tcctcagcaa acggggattc 120
 agcgtccgat cctttggaac agggactcac gtgaagcttc caggaccagc tcccgacaag 180
 cccaatgttt atgatttcaa aaccacatat gaccagatgt acaatgatct tcttaggaaa 240
 gacaaagaac tgtatcccag cgggttgccc tttaaaaacc ccccggtgtg tcctccctgg 300
 aaggtgttac gtgtggctcg ggcacaggag gcgtgtcacc ctgtgcagtg cacacactgg 360
 ctctctgtc tttgcgagag cttggtttct attcctgggtg cacgtcggat cgtccacggg 420
 ttagttccag tgccacccat ggcagtaggc gtggtgaggc gcacagacac ggtgtggggg 480
 tcaccctgac gtggttcagc agagggtcgt gacatagcgt agaccaggga tgcttaggtg 540

aggaggtgga acccacaaaa tccattgct tttcacactg canggctgcc cgttatttcc 600
 tttgcagggtt ggtgtgcgtg cntgtgtgcc tgcgtgcctg atacacatgg anccgggctg 660

<210> 3328

<211> 805

<212> DNA

<213> Homo sapiens

<400> 3328

tctaaacatc attccaacct ttgcaaactt tatagactac ccatccatga aaaacgcttt 60
 gataccaaga attaaaaatg cttgtctaca aacatcttcc cttgcgggtc gtgtaaattc 120
 attagtgtgc ttaggaaaga ttttggataa cttggataag tggtttgtac ttgatgatat 180
 cctacccttc ttacaacaaa ttccatccaa ggaacctgcg gtcctcatgg gaattttagg 240
 tattttacaaa tgtactttta ctcataagaa gttgggaatc accaaagagc agctggcccg 300
 aaaagtgttg cctcatctta ttcccctgag tattgaaaac aatcttaatc ttaatcagtt 360
 caattctttc atttccgtca taaaagaaat gcttaataga ttggagtctg aacataagac 420
 taaactggag caacttcata taatgcaaga acagcagaaa tctttggata taggaaatca 480
 aatgaatgtt tctgaggaga tgaaagttac aaatattggg aatcagcaaa ttgacaaagt 540
 ttttaacaac attggagcag accttctgac tggcagtgag tccgaaaata aagaggacgg 600
 gttacagaat aaacataaaa gagcatcact tacacttgaa gaaaaacaaa aattagcaaa 660
 agaacaagag caggcacaga agctgaaaag ccagcagcct cttaaaccac aaggccacac 720
 ctggtgctac tggtnaacag actaaggact tgacngacac actggtgggt aatatggcat 780
 ccttggacca gcccttttgg ttgna 805

<210> 3329

<211> 793

<212> DNA

<213> Homo sapiens

<400> 3329

```

agcgcgcgga agaaaaacca gcaagaaggc ggCgggggaa gatggcggtc ctggggtaga 60
gtttgcaagc tttctgacta ggctagtcga gtaactattc gggtcatggc gtcaaaactca 120
actaagtctt tcctggcaga tgccggctat ggCgaacagg aactggatgc caactctgcc 180
cttatggaat tggacaaagg cctaagatct ggcaaacttg gtgaacagtg tgaagcagtt 240
gttcgctttc ccagactttt tcagaagtat ccattcccta ttcttatcaa ttctgcattc 300
ctaaagttag ctgatgtttt cagagttgga aataatttcc tgaggctatg tgttcttaaa 360
gttaccacaac aaagtgagaa acatttggag aagattctaa atgtggatga atttgtgaag 420
agaatttttt ctgtgattca tagtaatgat cctgtggcaa gagccatcac cctccggatg 480
ttgggaagtc tggcatcaat aattcctgag aggaagaatg ctcatcatag tattcgtcag 540
agtttagatt cacatgataa tgtagaagtt gaagctgctg tttttgctgc tgcaaacttc 600
tctgcacagt caaaggattt tgctgtagga atctgtaaca aaatcagtga aatgattcaa 660
ggtttagcga caccagtaga cttgaagcta aaattgatcc cattctacag cacatgcnc 720
atgatgcaat cttggcttnc agtgctcgtc aacttttaca acagctggca catnctatcc 780
gtcaccaaaa tgg 793

```

<210> 3330

<211> 706

<212> DNA

<213> Homo sapiens

<400> 3330

```

gaaaaggttg cgaagatggc gacggccttg agcgaggagg agctggacaa tgaagactat 60
tactcgttgc tgaacgtgcg cagggaggcc tcttctgaag agctgaaagc tgcctaccgg 120
aggctctgta tgctctacca tccagacaag cacagagacc cagagctcaa gtcacaggcg 180
gaacgactgt ttaaccttgt tcaccaggct tacgaagtgc ttagtgaccc ccaaaccagg 240
gccatctatg atatatatgg gaagagagga ctggaaatgg aaggatggga ggttgtggaa 300
aggaggagaa cccctgctga aattcgagag gagtttgagc ggctgcagag agagagagaa 360
gagaggagat tgcagcagcg aaccaatccc aagggaacga tcagcgttgg agtagatgcc 420

```

accgaccttt ttgatcgcta tgatgaggag tatgaagatg tgtccggcag tagctttccg 480
 cagattgaaa ttaataaaat gcacatatcc cagtccattg aggcaccctt gacagcgaca 540
 gacacagcca tcctctctgg aagcctntca acccagaatg gaaatggagg aggttccatt 600
 aactttgcgc tcagaccagt tacttnggca aagggatggg gagagttgga atttgagact 660
 ggagacctac aggggccttt gntcgggtctc aactgttccg naatct 706

<210> 3331

<211> 814

<212> DNA

<213> Homo sapiens

<400> 3331

tgaattagaa gattttccag tacttggaaat tgactgtgag tgggtaaatt tggaaggcaa 60
 agccagccct ctgtcacttc taaaaatggc ctccccaagt ggcctgtgtg tcttggttcg 120
 cctgccaag ctaatctgtg gaggaanaac actaccaaga acgttattgg atattttggc 180
 agatggcacc attttgaaag ttggagtggg atgctcagaa gatgccagca agcttctgca 240
 ggattatggc ctctgtgta ggggtgcct ggacctccga tacctagcca tgcggcagag 300
 aaacaatttg ctctgtaatg ggcttagcct gaagtccttc gctgagactg ttttgaactt 360
 tccccttgac aagtccttc tacttcgttg cagcaactgg gatgctgaga ctctcacaga 420
 ggaccaggta atttatgctg ccagggatgc ccagatttca gtggctctct ttcttcatct 480
 tcttggatac cctttctcta ggaattcacc tggagaaaaa aacgatgacc acagtagctg 540
 gagaaaagtc ttggaanaat gccagggtgt ggtcgacatc ccatttcgaa gcaaaggaat 600
 gagcagattg ggagaagagg ttaatgggga agcaacagaa tctcancaga agccaagaaa 660
 taagaagtct aagatggatg ggatgggtgcc aggcaaccac caaggagag accccagaaa 720
 acatnaaaga aagcctctgg ggggtgggcta ttctgncaga aaatcacctc tttatgataa 780
 ctgntttctt catgtcctg atggacaagc ccct 814

<210> 3332

<211> 794

<212> DNA

<213> Homo sapiens

<400> 3332

```

gagagagaat gttaaaggat gaagtttcca aatgtgtatg tcgctgtgaa gatctggaga 60
aacaaaacag attacttcat gatcagatcg aaaaattaag tgacaaggtc gttgcctctg 120
tgaaggaagg tgtacaaggc ccaactgaatg tatctctcag tgaagaagga aaatctcaag 180
aacaaatfff ggaaattctc agattttatac gacgagaaaa agaaattgct gaaactaggt 240
ttgagggtggc tcagggtgag agtctgcgtt atcgacaaag ggttgaactt ttagaaagag 300
agctgcagga actgcaagat agtctaaatg ctgaaaggga gaaagtccag gtaggtatac 360
taagctttta gaaagcactt gttaaataca aagagaagca ctcatttata tctctacat 420
ttaacgtaat gtaaaattta acttgaagta agcattcttc taaacttgta aattcattaa 480
gcatttggtta aacactaata tagtatagtg cttaaaagta aaggctctgt aaccaaactg 540
cctggtttca gattctagct tcataccatt agctgtggcc ttgggtacat tgnntaactt 600
ccctgctctt agtttcttca tctgtaatat ttggataata atgagggtta attgagtttg 660
tgcacatgaa gcatttagaa gcatgtctgg tatgtantgg gtgcttaata aattccagct 720
atcttaattt attatagnta tggattattc ctgtggatag ncattctagg ataaagggga 780
tttaactgc ttcc 794

```

<210> 3333

<211> 875

<212> DNA

<213> Homo sapiens

<400> 3333

```

atatatgctg taataattta agtaaaatta ccttcttttg tggaaatgta gaacagctgc 60
tcaactgaaat ggatatttct tcatatcctt gaaaactggt gagtcaccct tagtattctc 120
ttcttagata taataagttc taatttttcc ttacttggct catttttaac ccttttatct 180
ttttattatt ctgaaatctc tccaaggccc tcacatgtcc tcaagttgta gagtcttaaa 240

```


ttggacaaca ctttaattac agcctgaagg ttaggtagtt gttattccat ttatataatct 300
tagtatttga gtttactttt gaaatataaa gtcttagtga ctaatttagc atgtggttct 360
ctgccactcc cticctgacc acccaccacc cctcattctt atcttctttt tttaccttgt 420
ttgtacaaaa accagttgtt gcctatttta tttcttctgt ccataccctg tctgtctatg 480
catttaaaaa cagagaactc attccttata aaacagacaa accagggata attgtcaaca 540
tcaaaaaaga attcttttaa tcaactgcagg cticctttta ataggtgttt cctgtgggtg 600
ttttaagtgt ttttatatag gtcattcaact gcttgatata aagaaactaa agataaaggg 660
ttaagaggca gtgccagttg aagaacagtt agaaattggg ataaaacagt agtcttaagt 720
aaacagtaaa atcattcaga ttcacagaaa aaaaatatgn atatatatat ttttgagatg 780
gagcttacag ggtgtccagc ttggaatgca tggcgtgatc tagttactgc aacttggctc 840
cgggtcaagc ganctctgct aantccgaga gtgga 875

<210> 3334

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3334

aaacttcatt gagcacctgg gtcgttttcc tgctcatatc ctggactgtc tttcagggat 60
ttactaccgg ctccggggac ttgagcaagt cttgaatacg caggatgttc aggatgttca 120
gaacgttcag aacatttttag aaatgctgtt gcgactcctg gacacttacc gggacaagat 180
tcccaggagg gccttgtcac catcctacct gactgtgtgt ctgaaactgc atgaagccat 240
ctgcagcagc acaaagctac ttaagtttta cgagctgcca gccttatctg ccgagattgt 300
ctgcagaatg attagacttc tatctcttgt ggattctgca ggacagagag atgaaactgg 360
aaataattca gtccaaacag tcttccaagg gacccttgct gctacgaaaa ggtggctccg 420
agaagttttt acaaagaaca tgctcacatc ttcaggtgcc tcattcacat acgtcaagga 480
aattgaggtc tggaggcggc tgggtggaat ccaattcccc gcggagcatg gctggaagga 540
gtcgttgctg ggagacatgg aatggaggct cacaaaggag gaaccctct tccagatcac 600
tggctactgc aatagttgct gggacaccaa aggttanag gacagtgtgg ccaagacctt 660

ngagaaatgc atcattgaag cccgtgagct caacctggca ggtgaacaat cttttcttct 720
gggnaacgga ttcggcttac anctggg 747

<210> 3335

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3335

agtgggcggg cgcggcgcat tgctgctcgg cggcgccggc gccgggggtcc gggcggccat 60
ggggcaacag gcggccaggg cgccaagggc caggtagcga cggctggcgg cggcgcggcg 120
gcggggcctg cgggctcggc ccggcatgta gacgccccg caggcgcccg cggcagcgaa 180
cggcatcagt gtttttctga ccgaagtict catttctga caatggaaat ggaacaagaa 240
aaaatgacca tgaataagga attgagtcca gacgcggctg cttactgctg ctcggcctgc 300
cacggcgatg agacctggag ttacaaccac cccatccggg gccggggccaa gtctcgcagc 360
ctgtctgcct cgcccgcctt ggggagcacc aaggagtcca ggaggacacg ctctcttcat 420
gggccatgcc cggtgaccac ttttgacca aaggcctgtg tgctgcagaa cccccagacc 480
atcatgcaca ttcaggaccc cgcgagccag cggctgacgt ggaacaagtc cccaaagagc 540
gtccttgtca tcaagaagat gagagatgcc agcctactgc agccgttcaa ggagctcttg 600
cacgcacctc atggaggaga acatgatcgt gtattgtgga aaagaaaagt gctngaagac 660
ccttgccatc ggcagccaat gaaaagcttt tgggggcaag tggaaagaaa gaaaaatttc 720
ttgtaccctt ttcnaaggaa agaattattg aatgnaccan ttttcccaa ttca 774

<210> 3336

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3336

agagcggagc gaggaccgcg tccggcgagc tcttcaatga gcagcgcgga aactgcaccc 60
cagacccgag cctgctgcgc gccccctccc agagctcacc tgggtgccagg taacaggcct 120
ggcctcgcgc tgtggatgat gatggccttg cccccgtgag ctacaacctg gccttcagca 180
cccgcccacc tccaaccagc aggatgcggc tgtggaaggc ggtggtggtg actttggcct 240
tcatgagtgt ggacatctgc gtgaccacgg ccatttatgt cttcagccac ctggaccgca 300
gcctcctgga ggacatccgc cacttcaaca tctttgactc ggtgctggat ctctgggcag 360
cctgcctgta ccgcagctgc ctgctgctgg gagccacat tgggtgtggc aagaacagt 420
cgctggggcc ccggcggctg cgggcctcgt ggctggatcat caccctcgtg tgcctcttcg 480
tgggcatcta tgccatggtg aagctgctgc tcttctcaga ggtgcgcagg cccatccggg 540
acccctggtt ttgggccctg ttcgtgtgga cgtacatttc actcggcgca tncctnctgc 600
tctggtggct gctgtcaccg tgcgggcaag gcaccaagc cctggaccag gggcggncac 660
cgaggctta 669

<210> 3337

<211> 769

<212> DNA

<213> Homo sapiens

<400> 3337

attcttccac ccggcaccgg ctccgcaatg aacaacttca ggttcactga gctgagcggga 60
ttccactcgc tgtgccctcg gagcctgcct gaatctcccg ccagttctca aaccatgcag 120
ctgagtaact gcaagggcgc ctttgaggag tagcacgcag agagtgtcaa tgaagacctc 180
aaagtctgga gaaaaatgac ctttcatgga ataagaagta tacctccttc tacatgtttt 240
tgtcttactg acctctgata actggaacac atgactctgg gtctgtagaa agtcaactga 300
tcaaactcat cctcaccatg catcaactgt tcagactggt tttgggacaa aaagatcttt 360
cacgagctgg ggacctcttc tccttagatg actctgagat tgaagacagc cttacagaag 420
ctttggagca aattaagata attagctcat cttcagatta ccaaaccaat aacaatgacc 480
aggcagtagt tgaaatctgt atcacaagaa tcacaacagc catcagagag accgagtcca 540
ttgaaaagca tgcaaaggcc cttgtggggc tctgggactc ctgcttgga cataacctga 600

gacccttttg gaaagacgaa gacacttctc atgcaaaaat cgcatctgat atcatgagtt 660
gcattttaca gaattacaac cgacccccag tgatggcatt agccattccc attgcagtga 720
aaattcttca cagaggcaac aaggnactgt gcnggaatat gnctaacta 769

<210> 3338

<211> 677

<212> DNA

<213> Homo sapiens

<400> 3338

gagaacaacg gaggcagagg agctgaagac tccagtatgc aactgactac aaggaggtag 60
tcgtttgaaa agctttcttt ctttctctga actccttctt tccctcctct caggtcattg 120
ggtgaccccg ggccgggagg agacaggtga atcccaagag aggaggaaga gggagggaca 180
gatgatggag ggagaaccgc gtttaggcaa tgaatgagcc tgctgcatcc gcaccacctg 240
ttccttccaa ggggtgccacc ccgacctgcc agcagggttc ccacaccaac cgggccgcga 300
ctcctgccgg tgcgcccac ttgcccgcga aaggccgggc ctcttctccc ccagatcggg 360
gagaatgaga accggcagtc tagaagccgg gaggtcgggg cctagtccgg aaccagggcc 420
tcaagcgtgg ggatggaatg aagaagcctg tggtccttg cgcgcgggcc atagtaggaa 480
ccacagagag ggagcaaagc aatgcattcg gcctgacgag agctatgaag gcgggggtccc 540
gggcgggagt ggctcaatgc ccgcccggcc gaggttaggg gtgacaggcc cggttaccgg 600
ctaaatcctc ccaccgnttg ccggacctta cacttaccaa gatccgcttg aaagcgcat 660
cttcttgggc nggagnt 677

<210> 3339

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3339

agctgtgaga cgacgagtgc gtgaagtga ggcgattgag aggggctgag ggaattgtcc 60
 tctgtggaag ggactttctt ttggccctag gcccttccct gccctgtcg tcagcagaga 120
 gatggaaaac ttgatgacta gctccaccct accgcccctt tttgcagatg aagacggttc 180
 caaggagagt aatgatctgg ctaccactgg gttaaatac ccagagggtc catacagtag 240
 tggcgccaca tcatccacca acaatccaga atttgtggag gatctctctc aaggtcagtt 300
 gcttcagagt gagtcttcaa atgcagcaga aggcaatgaa cagaggcatg aagatgagca 360
 acgaagtaaa cgaggagggtt ggtccaaagg aagaaagagg aagaaacctc ttcgagacag 420
 caatgcaccc aaatcccccc ttacaggata tggtcggttc atgaatgagc gtcgagaaca 480
 acttcgagca aagagaccag aagtccatt tccagaaatc acaaggatgt taggcaatga 540
 atggagtaaa ctgcctcctg aggaaaaaca gcgctacctt gatgaagcag acagagataa 600
 ggagcggttac atgaaggaac tggaacagta tcagaaaaca gaggcctaca aggtcttcaa 660
 tanggaaaac ccangaccgt cagaaaggca aaatntcata ggcaagatgc aaccccg 717

<210> 3340

<211> 908

<212> DNA

<213> Homo sapiens

<400> 3340

acacaacaat ttgataccag caaacgagct ctgtctacct ggggaccagt tccttacctt 60
 ccgccaaaga caatgactag caacctagaa aaaagttcac aagaacaatt acttgatgca 120
 gcacatcatc gacactggcc tggagtattg aagggtgtat caggatgcca catatcctta 180
 tttcagattc cattaccaga agatgggatg caatttggag gatcaatgag cttacatgga 240
 aatcatatga cactggcatg ttttcatggt ccaaattttc gttcaaaatc ttgggccctt 300
 tttcatttag aagaacaaa tattgctttt tggactgaag ctacagaaaat ctgggaagat 360
 ggctccagtg atcattctac atatattgta caaacactag attttcacct gggtcataat 420
 actatgggta ccaaaccatg tgggtgcttg gaaagtccta tggcaacaat atccaagata 480
 acaaggcgtc gccatgaaaa tccaccccat ggagtagcaa gtgtgaaaga atggttcaat 540
 tatgttacag ctacaaggaa tgaagagcta aatctgcttc gtaatgttga tgctaacaac 600

actgagaata gcactactgt gaagaattct agtttngtga gtggattcag aggangttct 660
 agctacaacc atgaaacaga gactatcttt gcattaccaa ggatgcagct tgactttaaa 720
 tccattcatg ttcaagaacc acaggagcct tcattacagg atgccagcct gaagcccaaa 780
 gtagaatgta atgggtggtga cagagttcac tggccacatt tgngtgacta tggatgctga 840
 gctcatcatg gttcttcatg aattaatatc agcttatctt aaagaaaaag aaaaagcntt 900
 ttttcnct 908

<210> 3341

<211> 768

<212> DNA

<213> Homo sapiens

<400> 3341

cagtgcgcag gcgtgagcgg tcgggccccg acgcgcgcgg gtctcgtttg gagcgggagt 60
 gagttcctga gcgagtggac ccggcagcgg gcgatagggg ggccagggtc ctccacagtc 120
 agccatggca gcgctgcgct acgcggggct ggacgacacg gacagtgagg acgagctgcc 180
 tccgggctgg gaggagagaa ccaccaagga cggctgggtt tactacgcca atcacaccga 240
 ggagaagact cagtgggaac atccaaaaac tggaaaaaga aaacgagtgg caggagattt 300
 gccatacgga tgggaacaag aaactgatga gaacggacaa gtgttttttg ttgaccatat 360
 aaataaaaga accacctact tggaccecaag actggcgttt actgtggatg ataatccgac 420
 caagccaacc acccggcaaa gatacgacgg cagcaccact gccatggaaa ttctccaggg 480
 cccggatttc actggcaaag tggttgttgt cactggagct aattcaggaa tagggttcga 540
 aaccgccaag tcttttggcc tccatggtgc acatgtgatc ttggcctgca ggaacatggc 600
 aagggcgagt gaagcagtgt cacgcatttt agaagaatgg cataaagcca aggtagaagc 660
 aatgaccctg gacctngctc tgnttccgta gcgtgcagca ttttgcttga agcctttcaa 720
 ggcccaagaa ttgtgccttc tttnatggtg ccttgtgtgc caacgcaa 768

<210> 3342

<211> 810

<212> DNA

<213> Homo sapiens

<400> 3342

```

cgcgcgcccc tgccccggccc accgagccct ggtgtggcag cggctcatgg cggccgtggg 60
gccccgcag cagcaggtgc ggatggccca tcagcaggtc tgggcggcgc tcgaagtggc 120
gctccgggtg ccctgccttt acatcatcga cgccatcttc aactcctacc cggattccag 180
ccaaagccgg ttctgcatcg tgctccagat cttcctccgg ctctttggtg tatttgcac 240
cagtattggt ctgatcttgt cacaacgac acttttcaag ttttacacgt acagctcagc 300
ctttctgtta gctgcaactt cagtgttgg gaattattat gcttctttgc acattgactt 360
ctatggtgcc tacaacacgt cagcttttgg aattgagctg cttcctcgaa aaggtccctc 420
gctgtggatg gcacttatcg ttctacagct aacatttggga attggatacg ttacactact 480
ccagattcat tccatctatt cacaattaat tattttggat ctcttgggtc ctgtaatagg 540
cttaatcaca gagctacat tacacatcag agagacttta ctgtttactt cttccttgat 600
tctcacatta aatacagtgt ttgtcctggc agtgaaactg aagtggtttt attattccac 660
acgatatggt tatcttttgg tgangcacat gtatcgaatt tatggattac aagttattga 720
tgaggacac atggaagang attcgtttcc cagacatact acgaagtctt tttggctaac 780
aagaagttac aggttcangc tacaagnggt 810

```

<210> 3343

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3343

```

tcttaaaca ggagaagtgc cagaaagccc ggaagcaagg aaggaaagt accaagcatg 60
tggaaaaatg gatactgtgg atattgcaaa caactctact ttgggaaaac ccaagaggaa 120
aagaagaaaa aagaaggggc atggctggag cagaacggga acgagaacgc agaaaaaca 180
ccaacaaaat gataacagca aagccgatgg ccagctggtc tcgagtgaag agaagcgaa 240

```

catgaatctg aaagaccttt ccaagattag ggggagaaag agaggcaaac ctggaaccca 300
 ctttactcag agtgacagag ctccacagaa aagagtccga tcaagagctt caagaaagca 360
 caaagatgaa actgtggatt ttccaggctcc ttactttcca gtgacctgtg gtggggtgaa 420
 gggaatttta cataaggaga aattggaaca aggaaccttg gcaaagtgtg tacagactga 480
 ggatggaaaa tggttcaccc ccatggaatt tgaaatcaaa ggaggctacg caagatcaaa 540
 gaactggagg ctgagttgtg cgctgtggcg ggtggccctt acgacggctg atggaggaag 600
 gatctctacc taatccttca agaatatatt acaggaacaa aaagagaata cttgaagtct 660
 caaaacaata gctcaattga cccttgtatg agaaacttgg attaattgna agtgttccgg 720
 gaccggaagg gaacttntct ggtgcgaaac tttgnt 756

<210> 3344

<211> 741

<212> DNA

<213> Homo sapiens

<400> 3344

ctttcccgag ccggggccat ggcacctgca aggtgtttct cagcaagatt gaggaccgtg 60
 tttcagggcg tggggcattg ggctttgtcc acatgggctg gcctgaagcc cagccggcta 120
 ctgccacagc gggcttctcc caggctgctc tcggtcggcc gtgcggacct cgccaagcat 180
 caggaactcc cggggaagaa gctgctctct gagaaaaagc tgaaaaggta ctttgtggac 240
 tatcgagag tgcttgtctg tggaggaaac ggaggcgctg gggcaagctg cttccacagt 300
 gagccccgca aggagtttgg aggccctgat ggaggggacg gaggcaacgg tggacacgtc 360
 attctgagag ttgaccagca agtcaagtcc ctgtcgtcgg tcctgtcgcg gtaccagggt 420
 ttcagtggag aagatggagg gagtaaaaac tgcttcgggc gcagtggcgc cgtcctctac 480
 atccgggtcc ccgtgggcac gctggtgaag gaggagggca gagttgtggc cgacctgtct 540
 tgcgtgggag atgagtacat tgccgcgctg ggcggggcag gagggaaagg caaccgcctt 600
 cttcctggcc aacaacaacc gtgcccctgt gacctgtacc cctggacaag ccaggacagc 660
 agcgagttct tcacctggag ctcaagacgg tggcccacgc cngaattggtg ggattnccca 720
 acgcccggga agtcctnact g 741

<210> 3345

<211> 718

<212> DNA

<213> Homo sapiens

<400> 3345

```

aaaaaaagtc tgcgcggcgc ggccaggccc ggccgaccgc gtctcggctc ccgcgtctgc   60
cagcctggct ggcagtcctg ctgtccatcc cgccgcgccg gggcagtcta ggcggagcgg   120
gggctcaggc ggcggcggcc tcgacgcgag tgagtgtcgt ggttggggtg ctggaccagc   180
agtgcctacc ctgcctgcc tgggcctcag tttccacatc tgcacaatgg gggtgaccat   240
ccctgccctg ctggctgcca ggagcggctg tgagtcttca ggcgtggatg cagcctgggg   300
gaagccatag ggcgctttca caggcctggc cttcaccatg gcgggaggga gaccgcatct   360
gaagaggagt ttctccatca tcccctgctt tgtcttcgtg gagtccgtgc tgctgggcat   420
tgtgatcctg cttgcttacc gcctggagtt caccgacacc ctccctgtgc acaccaggg   480
attcttctgc tatgacagta cctacgcca ggcctacca gggcctgagg ctgccagccg   540
agtgcctnct gctcttgtct acgcactggt cactgccggg cccaccctna cgatcctgct   600
gggagagctg gcgcgtgcct ttttcctgac caccttcacc gtccagtcac cggggagagc   660
accatcgtgt ctggggcctg ctgccgcttn acccccant gcngaagctg gtccgctt   718

```

<210> 3346

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3346

```

gaaccccaag tccagtttct ggaagctggt gcggcacctg gaccgcgtgg atgccgtgct   60
ggtgaccac cctggcgccg acagcctccc cggcctcaac agcctgctgc ggcgcaaact   120
ggcggagcgc tccgaggtgg ctgctggtgg gggctcctgg gacgacaggc tgcgcaggct   180

```

catctccccc aacctggggg tcgtgttctt caacgcctgc gaggccgct cgcggtggc 240
 gcgcggcgag gatgaggcgg agctggcgct gaggctcctg gcgcagctgg gcatcacgcc 300
 tctgccactc agccgcggcc ccgtgccagc caaaccacc gtgctcttcg agaagatggg 360
 cgtgggcccgg ctggacatgt atgtgctgca cccgccctcc gccggcgccg agcgcacgct 420
 ggctctgtg tgcgccctgc tgggtgtgga cccgcgggc gccggcgaga aggtggtgcg 480
 cgtgctgttc cccggttgca cccgcccgc ctgcctcctg gacggcctgg tccgcctgca 540
 gcacttgagg ttcctgcgag agcccgtggt gacgcccag gacctggagg ggccggggcg 600
 agccgagagc aaagagagcg tgggctcccg ggacagctcg aagagagagg gctcctggca 660
 cccaccctag cctggcagga gcgcctgggg tggccgcaag gagcagcacg gctgagccca 720
 cgagatgaga agagcaagac cccggagtaa gaaaccaaca tgtccgacac gngagncgga 780
 ctttggcact aaaaatcagg acagccnagg cag 813

<210> 3347

<211> 703

<212> DNA

<213> Homo sapiens

<400> 3347

agagcgcggc gcgaccggac gctgcgggcg gggaagagga tggagactgt ggcgtccgct 60
 gcaacggttg gggctgcgcg tgagaagggtg gcggtgtagg cacctgcgct cggggaaggc 120
 tggcggcggc ggccgagcca tggcgggaga ccccttctc tgggctccct gaagtctcgg 180
 ggagccgtga cccatgggat cgttgagcag ccgggtgctg cgccagccaa gaccagccct 240
 tgcccagcag gcgcagggtg ccagggcggg gggctcggcc cggaggccgg acactggaga 300
 cgatgcggcg ggccacggat tctgttactg tgcgggcagc cacaagcgca agcggagcag 360
 cgggtccttc tgctactgtc accctgactc ggagacggac gaggatgagg aggaggggga 420
 cgagcagcag cggctcctca acaccctcg aaggaaaaaa ttaaagagta catctaaata 480
 tatttatcaa acattatatt tgaatggtga aaacagtac attagattt gtgctctagg 540
 agaagaatgg agcttacaca aaatatattt atgtcaatct ggctactttt ctagtatgtt 600
 cagtgttct tggaaagaat ccancatgaa tattattgaa ctggagattt ctgaccagaa 660

catggatgta gaaacacttn angttgcatt tggttactgt atc

703

<210> 3348

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3348

accccacccg cttccggccg cggctcgggt ctcccgccctc cgcctccgcc gcggctcgtg 60
 gttgtcccg catggcactg tcgcgggggc tgccccggga gctggctgag gcggtggccg 120
 ggggccgggt gctggtggtg ggggcgggcg gcatcggctg cgagctcctc aagaatctcg 180
 tgctcaccgg tttctccac atcgacctga ttgatctgga tactattgat gtaagcaacc 240
 tcaacagaca gtttttgtt caaaagaaac atgttgaag atcaaaggca caggttgcca 300
 aggaaagtgt actgcagttt taccgaaag ctaatatcgt tgcctaccat gacagcatca 360
 tcaaccctga ctataatgtg gaatttttcc gacagtttat actggttatg aatgctttag 420
 ataacagagc tgcccgaaac catgttaata gagtgtgcct ggcagctgat gttcctctta 480
 ttgaaagtgg aacagctggg tatcttggac aagtaactac tatcaaaaag ggtgtgaccg 540
 agtgttatga gtgtcatcct aagccgaccc agagaacctt tctggctgt acaattcgta 600
 acacaccttc agaacctata cattgcatcg tttgggcaaa gtacttggtc aaccagttgt 660
 ttggggaaga agatgctgat caagaagtat cttctgacag agctgaccct gaacttgcct 720
 gggaaccaac agaaccnaan ccagaactng agcat 755

<210> 3349

<211> 746

<212> DNA

<213> Homo sapiens

<400> 3349

attctttgaa atctagtcac attttagtga tctttgtgat cacaacagt atgggagttt 60

tttttttttt tttttttttt ttgaaacgga gtttcgctct tgttgcccag gctgcagtgg 120
 caatggtgcg atcttggtc actgcaacct tcgcctcctg ggttcaagcg attctcctgt 180
 ctcggcctcc cgagtagctg ggattacagg catgtgccac catgccgggc tgatttttgt 240
 attttttagta gagacggggt ttcacatgt tggtcaggct ggtctccaac tcctgacttt 300
 aggtgatccg cccgcctntg cctctcaaag tgctgggatt acaggcgtga gccaccgcgc 360
 ccggccagtt acgggaattt ttaatggagt tttacccttt ttagctcttt tccacatcac 420
 tacaggatcat cacatatact ttttacctta ctttttagcg tctcaaaaaa tagggagagc 480
 tctacctgaa cagtgcagag cccgtatccc tgatttccta ggctatttga tttctacatc 540
 caggaacgta gggatcatat cactgntctt gctttttctt cctaagaaaag gagagaattc 600
 ctgcacata tatatcgttg gcttggcctt ccaaagcaaa gcaaaaactaa actctggtga 660
 ttttgccctgg gaatnctcgg ggcccctagt attgnaact tctttgaact gtgangagct 720
 gctaatttgc aggtgacatg tgaaaa 746

<210> 3350

<211> 741

<212> DNA

<213> Homo sapiens

<400> 3350

atattttcag catcacattt taagaataat atgtgaaata caatatgttt tattagtcac 60
 ctttgaaaaa tacagtcttc cacaatctgg aaccacctct ttggttcaaa atgtgccatt 120
 cttctgtaat gtgtgtgata aacttaaaaa aaatctgtat cctttatcct aatcatctta 180
 cttggacatc atcctgaaac aaatgacaaa aacattcaca gttttatata caaagttatt 240
 ggtaacaatg ttcttaatag aattcaatta gaaaacatat aaaggcaaag gtagagttat 300
 ttgatgttat ggtttgaaag gattcccaca ccctcatgaa tattctttat tatgccagag 360
 ggaacctaat tcccctgcct ttgagtgtgg gatggcattg atgagttact tgtaccacat 420
 ataataggca ggaagtgatg gcacgtgaca ttggaaacaa cttcgtaaaa gtcaccgaga 480
 ctcatcctt gctttctcct atgtctccca cctggcagga agacatttgc catcatgtaa 540
 ggagagtict gcttagtgag gcattgacat ctccagccag cagtgccgtg agggangtgg 600

gcagctcaag cctcagtcaa accctgagat gaccatggtc ccactcaaca tctcagctgt 660
gaccatgtgg gagaattcaa gcctgagcca atcagnctaa ctgcttccan agtcctgact 720
ctnagaacca tgccagatta t 741

<210> 3351

<211> 708

<212> DNA

<213> Homo sapiens

<400> 3351

actttctaaa tcacagtgcc tgtggccgga tgacatggag ggagctccct gaccatagga 60
ggggtttagag acacgacgcc cctctaccct cactcacagc agaggtggaa agctggagac 120
tgacccagtc gcagagcgca cccactggg gacccccage tcagccatgc tggcctgtct 180
gcagaggacc cagaacgccc cgggccaaca cctggcctgc ccgagcaaga gcctggagct 240
gcgcaagtgc gaggcgggtgg ccagcgccat gcattctctc cgctacccga gcccagcaga 300
actggacgcc tatgccgaga aggtggccaa cagcccgtg tccatcaaga tcttccccac 360
caacatccgt gtgccccagc acaagcacct cagccgcaca gtcaatggct atgacaccgg 420
tggccagcgc tacagcccct acccacagca caccgctggc taccagggcc ttctggccat 480
tgtcaaggcc gcggtttcct cctccagcac ggnccgacca gctgggcccg ccaaaagtgt 540
gctcaagagc gccgagggca agcggaccaa gctgtcaccg gccgccgtgc aagtgggcat 600
tgcgccctac ccagtgccca gcaactctggg tcccttggcc taccccaagc cacctgangc 660
gcctggttca ccacccgggc tggccgcann cggcaattgg cggttcg 708

<210> 3352

<211> 832

<212> DNA

<213> Homo sapiens

<400> 3352

ctgccagccg cgctgctgct gctcctcctg ctgtgggacc gctgaccgcg cggctgctcc 60
gctctccccg ctccaagcgc cgatctgggc acccgccacc agcatggacg ctgcccgcgt 120
gccgcagaaa gatctcagag taaagaagaa cttaaagaaa ttcagatatg tgaagttgat 180
ttccatggag acctcgatcat cctctgatga cagttgtgac agctttgctt ctgataattt 240
tgcaaacacg aaacctaaat tcaggtcaga tatcagtga gaactggcaa gtgtttttta 300
tgaggactct gataatgaat ctttctgcgg cttttcagaa agtgagggtgc aagatgtatt 360
agaccattgt ggatttttac agaaaccaag gccagatgtc actaacgaac tggccggtat 420
ttttcatgcc gactctgacg atgaatcatt ttgcggtttc tcagagagtg agatacaaga 480
tggaatgagg ctgcagtcag ttcgggaagg ctgtaggacc cgcagccagt gcaggcactc 540
tggacctctc aggggtggcga tgaagtttcc agcgcggagt accaggggag caaccaacaa 600
aaaagcagag tcccgccagc cctcagagaa ttctgtgact gattccaact tcgattcaga 660
agatgaaagt ggaatgaatt ttttgagaa aagggttta aatntaaagc aaaacaaagc 720
aatgcttgca aaacttatgt ctgaattaga aagctttcct ggcttcgttc cgtggnaaaa 780
aattcccttc caagcttccg actnacaat caaagganac cgcgaaaggc gt 832

<210> 3353

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3353

tcacttacct attccataat tagtttcctt gtatgtaaaa tcaggggata ataatgtcaa 60
caaatagtta tctgcttaac attgttttat taaaaagcag gtatgttcgc atgaataaaa 120
caaccttccc ttttaaactc cttgtttggc atcctcaaac ctctcagctt gtttcagatg 180
ggaacttcaa cccaatatca ggtcacagtgc cccaggttga tctgtactcc gtgtgggctc 240
tgaaagcatc acccctgcag aggctggaag ccctagtctt cccaggggat gccttgtctg 300
caggtactgc cccagcctg cagtgaactc tggacctttt attgatcctg tgtgcatctg 360
gctccactct gataccagga agaattggggg ttgctggccc tggacttggt cctggacaaa 420
taaattgtgtt tgtcaaagcc ctttctgac atcggttgct tctagcccag gtggcactgt 480

ggagggtaat tagttctctt tattagaggg aacatcagga agctctgcgc tgctcaccgt 540
 ggacacatgt aaaaagattt tgtaaagca gctgttactt gccttttcat tatgctaag 600
 ggcagcctgt aagaaatgta acttcctgtc actggcacca agcaacacct atcagacaaa 660
 gcattgggtt ttctcactgg tgataagtgt gacttgtggg gaccagcgat aggatgctca 720
 tttttatccg ctaagtgcac aacgcttgta aaaaaccagc agtggncctt ttccacttga 780
 cgtgacacta ggtaactgt tacattgacc actgntgcac ctttagactg n 831

<210> 3354

<211> 578

<212> DNA

<213> Homo sapiens

<400> 3354

agcgcgggct tgaccggcgt cggcccgccg cctccgctgc cgnntcgccc caatccggtc 60
 cctctggccc ggcctgacct ggtctggctt gttcgggctc agcggccgcg aggccgcagc 120
 tcccgatgga aatcatatta tgtagaatac ttgggtgaca tctgcctgag agatctccaa 180
 gaattacaga ttgagtctcg ctctgttgcc caggctggag tgcagtgggt caatctctgc 240
 tcaactgcaac ctccgtctcc cgagttcaag cagttctcct gcctcagcct cctgagtagc 300
 tgggattaca gaagacaaaa atactaatgc atttgagaaa gcggtagttt tggggggagg 360
 gggaaaaagc aactgctttn ctgatctgca acttggctgg atgctaanaat gtcagtggac 420
 atgaatagcc aggggtctga cagcaatgaa gaggactatg acccaaattg tgaggaagag 480
 gaagaagaag angangacga ccctggggac atanaggact attacgtggg agtagccagc 540
 gatgtggagc agcagggggc tgatgccttt gatccga 578

<210> 3355

<211> 760

<212> DNA

<213> Homo sapiens

<400> 3355

```

acaccatgtc aagtctgcac aagagccgaa ttgcagattt ccaggatgtc ctgaaggagc 60
cctcaattgc attggaaaag ctgcgggaac tcagcttttag tggcatcccc tgtgagggcg 120
gactgcggtg cctctgtctg aagattctct tgaactacct tcccttggag agagcctcat 180
ggacctccat cctggccaag cagagggagc tgtatgccca gttcctgagg gaaatgatca 240
tccagcctgg cattgccaag gccaacatgg gtgtgtccag ggaggatgtg acttttgagg 300
accatccact caacccaac cctgacagcc ggtggaacac gtacttcaag gacaacgagg 360
tgctgtctga gatcgacaaa gatgtccgga ggttgtgccc agacatttcc ttcttcaga 420
gggccactga ctacccttgc ctctcatcc tggaccccc gaatgagttt gaaacccttc 480
gtaagagagt ggaacagaca aactgaaat ctgacacggt ggcccggaa cggagtgggg 540
tcacaaatca agagcagaac atcaagcctc agttctttgc cttccgctgg ctgacactgc 600
tgctgtccca ggagttcttg ctgcctgacg tcacccgcat ctgggactcc tcttcgcgat 660
gacaaccgct ttgacttcct cctcctcgtc tgctgcgcca tgctcatgct gatccgggag 720
canttgcttg gaaggggact ttactngaa tatgcgntg 760

```

<210> 3356

<211> 824

<212> DNA

<213> Homo sapiens

<400> 3356

```

aagacgctag cgctgcgatg gcggaggccg tggagcgcac tgacgagctg gtccgggagt 60
acctgtcttt ccgcgggttc acgcacacac tgcggcagct ggacgccgag atcaaggcgg 120
acaaggagaa ggggttccgg gtggataaga ttgtggacca gctgcagcag ttaatgcagg 180
tgtatgactt ggctgccctt cgggattatt ggagctactt ggagcgtcgg ctcttcagcc 240
gcttggagga tatatacaga cccacaatcc acaagctgaa aaccagcctg tttcgatttt 300
atcttgtcta cacaatccag acaaacagaa atgacaaggc tcaggagtgc tttgcaaagc 360
aggccacgga actccagaac caggctgagt ggaaggattg gtttgcctg cccttcctgc 420
catccccgga caccaacccc acctttgcta cctacttttc tcgacagtgg gctgacacct 480

```


tcattgtgtc cctgcacaac ttcttgagcg tcctgtttca gtgcatgcc a gtcctgtga 540
 tcctgaactt tgatgcggag tgtcagagga ctaaccaggt tcaagaagaa aatgaagttc 600
 tgcgtcagaa gctttttgca ttgcaagctg aaatccaccg actgaagaaa gaggagcaac 660
 agccagaaga ggaagaggcc ttgggtccaac acaaattggc tnccttatgtc ttcaacatgg 720
 accgcctggg ggactcggaa cttgncatgg tgtgcaaccc aaggaatgcc ttcctttttc 780
 cagtcacctt gtgtgggctt tctgncctcg ctgggtggctt anaa 824

<210> 3357

<211> 838

<212> DNA

<213> Homo sapiens

<400> 3357

gcggcgcgag cggtcggcgg cggcggaggc agtgtctccc ggtcgcgcgt ggaggtcgg 60
 cgctcagagc tgctgggcgc agtttctccg cctgctgctt cggcgcggct gtatcggcga 120
 gcgagcgagt tcccgcgagt tctcggtggc gctccccctt cctttcagtc tccacggact 180
 ggccccctgt ccttctactt gaccgctccc gtcttccgcc gccttctggc gctttccgtt 240
 gggccgattc ccgcccgtt cctcctgctt cccatcgaag ctctagaaat gaatgtttcc 300
 atctcttcag agatgaacca gattatgatg catcattatc acagaagaaa ttcgtgtcta 360
 tagcttttaa ggacttgatt acatcatttt caagcctgat agttttggaa tcaccattag 420
 agcttaagac acacctgcct tcatttcaac cacctgtctt cataccctga cgaagtgcac 480
 cttttaacac tcctttgtcc ttggattact taagatttcc cagaaataca tttgccacca 540
 acagagtagc caaatttata aggaaaaatg attcccaatg gatatttgat gtttgaggat 600
 gaaaatttta ttgagtcttc tgttgccaaa ttaaattgcc tgaggaaaag tggccagttc 660
 tgtgatgttc gacttcangt ctgtggccat gaaatggtag cacacagagc agtgctagct 720
 tgctgcagtc cctatttatt tagnaatctt aatagtata gtgaccta tggaattcta 780
 cgttaaattt gatgactcaa tncagaactg tgaatcttgt gaatatgcct acactgnt 838

<210> 3358

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3358

```

acatggcggc gggaaggag tgagccgcc cgcgccccg ccgcgccctc agatggagaa 60
attagcatac aaagaaactg acttgtcaga agtcagagca aggtattggt ggatccaggg 120
ataaatccca aacttcttaa cccctagacc ggTTTTtagt ccattgacta tgcagcctaa 180
tgtgatagac tggagtgatg ttagaaaaca caaatatggt cacctatcag agtctgcac 240
ccaatatcaa gaagctgctg acatcctgga tctaggtcat ttacctggg acaaatacct 300
aaaagaaaca tggtcagtcc cagcgccgtg ccattgcttc aagcagtcct acacacctcc 360
aagcaacgag ttcaagatca gtatgaaatt ggaagcacag gaccccagga acaccacatc 420
cacctgtatt gccacagtag ttggactgac aggtgcccgc cttgcctgc gccttgatgg 480
gagcgacaac aaaaatgact tctggcggct gggtgactca gctgaaatcc agcctattgg 540
gaactgtgaa aagaatgggg gtatgctaca gccacctctt ggatttcggc tgaatgcgtc 600
ttcttggccc atgttccttt tgaagacgct aaatggagca gagatggctc ccatcaggat 660
tttccacaag gagccacat cgccttccca caacttcttc aaaatgggaa tgaagctaga 720
agctgtggac aggaagaacc ctcatttcat ttgccagcc ctattgggga ngttcgggct 780
tanaagtgct tgncaattct gatgggtggc aa 812

```

<210> 3359

<211> 878

<212> DNA

<213> Homo sapiens

<400> 3359

```

aaagatatgc tagttttgat tacgaagatg caggctacca gactgcagaa cttgtaaaaa 60
tggatattct actgaatgga aatactgtag aggagctagt aactgttgta cacaatgtga 120
aagcctatag gaaaaacgtt ttggcaaaat gttatggtgg tgatattacc cgaaaaatga 180

```

agcttttgaa gagacaagca gaaggga aaaagctgag gaaaattggc aacgttgaag 240
 ttccaaaaga tgcttttata aaagttctga aaacacaatc ttctaaataa ttggtgggaa 300
 aacaaagaat tttcattgca atttgtaata tgctgacaac agaaagaaaa ttataaaatt 360
 tgcttggttac tttcagggtta ttcagggttca aataacctac tagtctttcg ttgaaaggga 420
 gtagttagtg ggtaggcaag agcttagatt ttgaagccat gttgcctgtt ctcaaatac 480
 tgttccaacc actcactagt aagggtgaccg tggccagatt aacctttgtt tcctcttcag 540
 taaaatcgag attatactac tacctacata agttgttggt gtgaagatta aatgaggtaa 600
 tacgttaaatt attcagaggt gcaagacaca tagtaagcac tcaattgtaa ctacagttaa 660
 gtccttaaatt gccatcgaaa ggtcttagaa actgacttta agcaaaatga cacgtagcac 720
 aatggctctg aatgatgtca tttccttnaa gtggttgnaa catcgatgaa ggaaaaaaaa 780
 attgggttat gccgtcattt cattttattt ntaattattt ttttgagac cagaatcttg 840
 cccctgggtcg nccaagnct tggaaatgcc aatggggc 878

<210> 3360

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3360

acggaagggg cgtgccggac cgaagtgcgc agactcggag gcatacttcc tttggtgacc 60
 attcttcagt gcatgaagac agacagcatc cagaaccgaa cgccccgtgc cctgggggaa 120
 ttagccatgg aacctgagag ctgtggggac atccactgtg ctggtgctgt tcccctgctt 180
 gtggagagcc tgacagcctg ccaggactcg cagtgcctac agagcgtggt gcgtgccctc 240
 cgtaacctgg cagactcacc ccagcaccgc ctggccttgg cacagcaggg agcagtgcgt 300
 ccgctggccg agtccttggc cactgccccca gatgctgcac tgaccttagc cctcgtccgt 360
 gccctcctgg aactcagccg aggctgctcc cgggcctgtg ctgagcagct aagtctgggt 420
 gggggatttg gccactcgt cagcctggct tcccaccca agcgggcagt acgcgaggga 480
 accattctga tcctcgccaa cctgtgtgcc cagggcctga ttcggcctgc actgggcaat 540
 gctgggtggc tggaggtgct ggtagatgag ctccggcagc gccgggatcc taatggagct 600

agcccaacct nccagcagcc cctggtgcgg gctgtgtgcc tncatgtcg tgaggccatn 660
aaccgggccc gactgcggga tgctggtggc ttggatctac tgatgggcct gctgcgggac 720
ccttgtgcaa acgcatggga cccttgtatt ggggcttgn cttgtggggn ttctgnatga 780
aacttggggg ccctggg 797

<210> 3361

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3361

cagcttgtct tctctgtttg gctatcattg ttggctagtc agcaaaaata aatctacatt 60
agaggcattc agaagtccag tatttcgaca tggaacagat aagaatggat tcagcttggg 120
tttcagtaaa aacatgcgac aagtttttgg tgatgagaag aagtactggg tgctacccat 180
tttttcaagt ctaggtgatg gctgctcctt tccaacttgc cttgttaacc aggatcctga 240
acaagcatct actcctgcag ggctgaattc cacagctaaa aatctcgaaa accatcagtt 300
tcctgcaaag ccattgagag agtcccagag ccaccttctt actgattctc agtcttggac 360
ggagagcagc ataaaccag gaaaatgcaa agctggtatg agcaatcctg cattaacat 420
ggaaaatgag acttaactct tcaagcaaga taaattcata ctttataaaa gtatcaatgc 480
tgtagatgga tggaagaggc ttcccacagg aaggtgccac cagtcagttg tgcctatgtc 540
cctttggctg gaaatgcaga atatgaattg attagttctc tccaagccat tgcttaaaat 600
ataacatgtt ttggatccaa tacacacatt gntacaacta acacaaattc ctattaaata 660
ttaaaagtag ttctggttta ttaatcaacg gggaaaacat cttcttcaaa aaacttggaa 720
taaatacagg accagttttt acccaaatat atgggtagca cagtttatca catngaaact 780
ncattaatca tctggatttt ccgaatctgn aaa 813

<210> 3362

<211> 876

<212> DNA

<213> Homo sapiens

<400> 3362

```

gctcgccgcc cgcccgccg acggagacgc agtcccagct atctgacttc atgtgaaaga 60
tggctaattgc agaagtgagt gtcccagtgg gggatgtggt tgtggtacct actgaaggaa 120
atgaagggga gaatcctgaa gacactaaaa cccaagtgat tttgcagtta cagcctgtgc 180
aacaagggat ttatgaagct gggtcggaga acaacacggc agttgtagca gtagaaactc 240
acacgataca caaaattgaa gaagggattg atacaggcac tatagaagca aatgaggata 300
tggaattgc ttacccata acttgtgggg agagcaaagc catcctcctc tggaagaagt 360
ttgtatgtcc aggaataaac gtgaagtgtg tcaagttcaa tgatcagttg atcagcccca 420
agcactttgt tcctctggct ggcaagtcca ctctgaagga ctggaagaga gctattcgtc 480
tgggtgggat catgctcagg aaaatgatgg actccggaca gattgatttt taccaacatg 540
acaaagtttg ctccaatacc tgcagaagca ccaaatttga tcttctgac agcagtgcaa 600
gagctccagt gccaggacag cagacaagtg tggtgcagac acccacttcg gctgatggta 660
gcatcacgca gattgccatc tcagaagaga gcatggaaga ggcagggtg gaatggaact 720
cagctctnac cgctgctgtc accatggcca cggaggaagg tgtnaaagaa agactcagag 780
gaaattcaga ggacactttg atgntctgga aaggatactg atgtagggtg gatggaagag 840
gttgctgcaa tttcngaagg aattgaggac tntca 876

```

<210> 3363

<211> 906

<212> DNA

<213> Homo sapiens

<400> 3363

```

attatacaga tacagacctg aagaagtaga tattgatgcc aagttaagcc gattatgtga 60
acaagataaa gtggtgcatg ctctggaaga gaaacttcag caactccaca aggagaaata 120
cacgcttgag caagctttgc tatcagccag ccaagagata gaaatgcatg cagataaccc 180
agcagccatt cagacagtgg tgttacaaag ggatgattta caaaatggac tgcttagtac 240

```

gtgtcgagaa ctttctcgag ccactgccga attggaacga gcatggagag aatatgataa 300
 gttagaatac gatgtaactg ttaccaggaa ccagacgcaa gagcagctgg atcaccttgg 360
 tgaagttcag acggaatcag caggaattca gcgtgcacag attcagaaag aactttggcg 420
 aattcaggat gtcattggaag ggctgagcaa acataagcag caaagaggta ctacagaaat 480
 aggtatgata ggatcaaagc ctttctcaac agttaagtac aaaaatgagg gtccagatta 540
 tagactctac aagagtgaac cagagttaac aacagtggca gaagttgatg aatctaattg 600
 agaagaaaaa tcagaacctg tttcagagat agaaacttca gttgttaaag gttcccactt 660
 tcctgttggg gtagtccctt caagagcaaa atcaccaaca cccgaatctt cgacaatagc 720
 ttcctatgta accttgagga aaactaagaa gatgatggat ctaagaacgg aaagaccag 780
 aagtgcagtg gaacagctct gtttggctga aagtactcga cccaaggatg actgtggaag 840
 aaccaatggg aaggaattgg aagacnttan caagcgtgcc tganggagaa gaaaaaagg 900
 ttaatt 906

<210> 3364

<211> 729

<212> DNA

<213> Homo sapiens

<400> 3364

aaaaaatgtt tgttgctggc tgaatggcaa tagatgtcta aggtggattc agtgtctggc 60
 aactgagac acctccaaga aggagattga tgcattcagg tcaatttaac ctggaatata 120
 tgactacccc tgaatccacc cagaaagggg gcccacaccc cttgtccatt tatgggtatt 180
 ttttttcgaa gttattaagc atattccttt tccacgaacc tcttctgtac tttgattgta 240
 ataggttggc tcttacaccc attccaaatg cagtttattt ttagaccgga ttgcaaatag 300
 tgatgtagtt ttaaccagta tggattagtt cagggatgaa ctgctccctc cagccttact 360
 ggctctgata cacagggttt tgttttgttt tgttttgttt tttgnttaag tcgagatata 420
 aaaactgaac acgataacac ttactcttaa atcaagcatt aacactttat ccctgttaga 480
 attctttgca tttntgtgtt tgtaacagaa acgccttaan aactatggg tngggaatat 540
 aggaaactat gtgtgtccca aggaaatccc tgtaaattta actcacctac aaaaggcttt 600

ttccccgcct ttggttgta accggcattc ctgaaagcca catgtgttta ttcattgggc 660
 ttgatcttat cagcaaata gatttctggg tttatgact tttgtctna tttatntat 720
 gcctacatt 729

<210> 3365

<211> 841

<212> DNA

<213> Homo sapiens

<400> 3365

ctctttaagg tgcccaggc tcgcgggcgc tgcgctgagg ggacggcggg aggcgcggcc 60
 tggcctcgca ctcaaagccg ccgcagcgcg ccccgggctc ggccgacccg gcggggatct 120
 aggggtgggc gacttcgagg gaccgtggcg catgtttcct gggagttact gatcatcttc 180
 ttgaagaaa catgaagta cactatgttg ctgtgcttac tctagccatc ctgatgttcc 240
 tgacatggct tccagaatca ctgagctgta acaaagcact ctgtgctagt gatgtgagca 300
 aatgcctcat tcaggagctc tgccagtgcc ggccgggaga aggcaattgc tcctgctgta 360
 aggagtgcac gctgtgtctt ggggcccttt gggacgagtg ctgtgactgt gttgattgac 420
 cctcctttca tttctgtcat gccacttgac aatgaaggaa ctgtatcagt tgacctatag 480
 aatagcccac attccggatt tgactgcttc ctgtggaagt cctaccatac tgactgttct 540
 gtcataaaca atttcatag gattatgtta aggtatgtgt aatcctcgaa attatagtga 600
 cacaccttca acttcaaaga gcacagtga ggagctgcac gaaccgatcc cttctctctt 660
 ccgggcactc acagaaggag atactcagtt gaattggaac atcgtttctt tcctgttgca 720
 gaagactttc acatcatgag aatctggttt catTTTTAGA aactgtgaac caagncacac 780
 caccagaatg tgtctgtccc anncaataat gggtcacgcg ccttatttcc agtggaccaa 840
 g 841

<210> 3366

<211> 867

<212> DNA

<213> Homo sapiens

<400> 3366

```

gtttctcggc cccgccgccg ccattacgga gctcccagtg gttgattctt caccacactg   60
aaaccattag gaaaaatcct tgtgggtaac agcagaggct tcagagtgtg acctgtactc  120
gggcctagaa attatttaaa atggcgactg atacgtctca aggtgaactc gtccatccta  180
aggcactccc acttatagta ggagctcagc tgatccacgc ggacaagtta ggtgagaagg  240
tagaagatag caccatgccg attcgtcgaa ctgtgaattc tacccgggaa actcctccca  300
aaagcaagct tgctgaaggg gaggaagaaa agccagaacc agacataagt tcagaggaat  360
ctgtctccac tgtagaagaa caagagaatg aaactccacc tgctacttcg agtgaggcag  420
agcagccaaa gggggaacct gagaatgaag agaaggaaga aaataagtct tctgaggaaa  480
ccaaaaagga tgagaaagat cagtctaaag aaaaggagaa gaaagtgaaa aaaacaattc  540
cttcctgggc taccctttct gccagccagc tagccagggc ccagaaacaa acaccgatgg  600
cttcttcccc acgtcccaag atggatgcaa tcttaactga ggccattaag gcatgcttcc  660
agaagagtgg tgcatcagtg gttgctattc gaaaatacat catccataag tatccttctc  720
tggagctgga gaagaagggg ntatctcctt aaacaagccc ttgaaagaga attaaattga  780
ggagtcatca aacagggtta aggaaaaagg ngctttctgg aagtttttgt gggggttcaa  840
aaatcaggaa aaaccctna gaaatnc                                         867

```

<210> 3367

<211> 846

<212> DNA

<213> Homo sapiens

<400> 3367

```

agcaggtttc gaatgctctt tacttccttt gtggagcaaa agaaaaaagc aggagtattt   60
gaacaaatca ctaagactca tggaacaatt attggcatta cttcagggat tgtcttggtc  120
cttctcatta tttctatatt agtacaagtg aaacagcctc gaaaaaaggt catggcttgc  180
aaaaccgctt ttaataaaac cgggttccaa gaagtgttg atcctcctca ttatgaactg  240

```


ttttactaa gggacaaaga gatttctgca gacctggcag acttgtcgga agaattggac 300
aactaccaga ggatgcggcg ctctccacc gcctcccgt gcatccacga ccaccactgt 360
gggtcgcagg cctccagcgt caaacaagc aggaccaacc tcagttccat ggagcttct 420
ctccgaaatg actttgcaca accacagcca atgaaaacat ttaatagcac cttcaagaaa 480
agtagttaca ctttcaaca gggacatgag tgccctgagc aggccctgga agaccgagta 540
atggaggaga ttccctgtga aatttatgtc agggggcgag aagattctgc acaagcatcc 600
atatccattg acttctaate ttctgctaata ggtgatgtga attcttaggg tgtgtacgta 660
cgcagcctcc agggcaccat actgtttcca gcagccaacc cttttctcca tcacaactac 720
gaagaccttg atttaccggt aacctattgn atgggtgatgt tttattctct tangcagtct 780
atatatgtta aaccaatcaa ggaacttact ctattcagng gaaacaatat catctctatt 840
gcttgg 846

<210> 3368

<211> 861

<212> DNA

<213> Homo sapiens

<400> 3368

gcggggcctc taccggcccg atggagcgcg cgggcgctac tagccgcggg ggccaagccc 60
ctggcttctt actgcggctt catactgagg gccgagccga ggcggcgcgg gtgcaggagc 120
aggacttacg gcagtggggg ctgacaggga ttcacctag ctcttaccag ctggaggag 180
taaactggct cggccagcgc ttccattgtc agaattggctg tctctggga gatgagatgg 240
gcctggggaa gacctgccag gaagattaaa tggatgaagg ccatttctga ttctttgtcc 300
cttgtctgtt ttgagcaact ggaaagaaga aatgcagaga ttgtctccag gtctttctctg 360
tgtaacatat gcaggcgaca aggaggaaag agcctgcctt cagcaagacc tgaaacagga 420
gtcacgtttt catgtgtac tgactaccta tgagatttgc ttgaaagatg catcatttct 480
aaaatcattc ccttggagtg ttcttgttgt ggatgaagct cacaggttga aaaaccaaag 540
ctccctgctg cataagacct tgtcagagtt ctcagtagtc ttcagttctc tgttgaccgg 600
aactcccatc cagaacagcc tccaagagct ctactccctc ctcagttttg tggagcctga 660

tctcttttcc aaggaagagg tgggagattt tattcaacgc taccaggata ttgagaaaga 720
atctgagtca gcaagtgaac tgcacaaact cttgcagcca tttcttgctt gaagccaatt 780
gaaaagctga ngtagcttcc agaactttcc caagaagacc agaaatngtg gatataccat 840
tggcattgtc aaccanttgc a 861

<210> 3369

<211> 854

<212> DNA

<213> Homo sapiens

<400> 3369

cattcaccaa caggatattt ttgccatgg tggattttga tgaaggctct gatgtatttc 60
agatgctaaa catgaattca gtcaccaact tcatcaactt tcctgcaaaa gggaaacca 120
aacggggtga tacatatgag ttacagggtgc ggggtttttc agctgagcag attgcccgg 180
ggatcgccga cagaactgat gtcaatatta gaggtagtag acccccaa attgctggtc 240
cccttatgtt gggattgctt ttggctgtta ttggtggact tgtgtatctt cgaagaagta 300
atatggaatt tctctttaat aaaactggat gggcttttgc agctttgtgt tttgtgcttg 360
ctatgacatc tggcaaatg tggaaccata taagaggacc accatatgcc cataagaatc 420
cccacacggg acatgtgaat tatatccatg gaagcagtca agcccagttt gtagctgaaa 480
cacacattgt tcttctgttt aatggtggag ttaccttagg aatggtgctt ttatgtgaag 540
ctgctacctc tgacatggat attggaaagc gaaagataat gtgtgtggct ggtattggac 600
ttgttgtatt attcttcagt tggatgctct ctatttttag atctaaatat catggctacc 660
catacagctt tctgatgagt taaaaaggct ccagagatat atagacactg gactactgga 720
aattgaaaaa cgaaaatcgt gtgtgtttga aaagaagaat gcacttgnat atttgnatta 780
cctctttttt caagtgattt aaatagttaa tcatttaacc caagaaaatg tgtantgcct 840
taaccagcaa tcct 854

<210> 3370

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3370

```

attgaagatt aaacgttctc tcttcaacta ccatgacacg aggatccatg cctgcctcta 60
ctttattgcc cctactggac attcactaaa gtccctggat ctggtcacca tgaaaaagct 120
ggacagtaag gtgaacatca ttccaataat tgcaaaagct gacaccattg ccaagaatga 180
actgcacaaa ttcaagagta agatcatgag tgaactggtc agcaatgggg tccagatata 240
tcagtttccc actgatgaag aaacgggtggc agagattaac gcaacaatga gtgtccatct 300
cccatttgca gtggttggca gcaccgaaga ggtgaagatt ggcaacaaga tggcaaaggc 360
caggcagtac ccctggggtg tggatgcagg tgagaatgaa aatcattgcg attttgtgaa 420
acttcgagag atgctgatcc gcgtgaacat ggaggacttg cgagagcaga ctcacacccg 480
ccactatgaa ttgtaccgac gctgtaagct tgaagagatg gggttcaagg aactgaccc 540
tgacagcaaa cccttcagtc ttcaggagac atatgaagca aaaaggaatg aattcctggg 600
agaactgcag aagaaagaag aagaaatgag acaaattgtt gttatgagag tgaaggagaa 660
agaagctgaa ctttaaggagg cagagaaaga gcttcacgag aagtttgacc ttctaaagcg 720
gacacaccaa gaagaaaaga agaaagtgga agacaagaag aaggagcttg aggangangt 780
gacaactttc agaagaagaa agccacggnt caa 813

```

<210> 3371

<211> 713

<212> DNA

<213> Homo sapiens

<400> 3371

```

cctgatattc tctccttctt ttgaagacct gcctccatcc atgagctgta tcttgatctg 60
tctgactgtc catgttttcc acctgcaacc atttgcattg gtacagccta ctgtttgtct 120
ccagttttta aactgtacaa gttgtgtttc ttaattctcc cttctgcctt gttctgggga 180
ggtggttatt catcatttgg aatcaccttt cccctccca tgtgctttcc ttcatttgag 240

```

atcttttgac ctttggcttt atttgggagg gggaagggtg ataaagtitt ctgtttccct 300
 ggttttcttt tgtactcctc tctgttgctt ccctcctccc attttcttgt ctattctgcc 360
 gctgtgtggg cctgggctat gcggcagggc agatttccca tcagagctcc aacatgcccc 420
 cagagtctgg aaagagattc aaaccagca agtatgtccc ggtctctgca gccgccatct 480
 tcctagtggg agctacgaca ctcttctttg cctttacgtg tccaggacta agcctgtatg 540
 tgtcacctgc agtggccatc tacaatgcaa ttatgtttct ctttgtgttg gccaaacttca 600
 gcatggccac cttcatggac ccagggattt tccctcgagc tgangaggat gaggacaagg 660
 aagatgattt ccgagctccc ctttacaaaa caagtggaga taaanggcatt nca 713

<210> 3372

<211> 902

<212> DNA

<213> Homo sapiens

<400> 3372

aggagttcga gaccagcctg accaaccatgg tgaaaccccc tctctactaa aaatacaaaa 60
 attagctggg cgtgggtggcg catgcctgta atcccagcta ctcaggagac tgaggcagga 120
 gaattgctta aacctgggaa gcagagggtg cagtgaact agatcatgcc actgcactcc 180
 actgccactg cctgggcaac agagcaagac tccatctcaa aaacaaacaa aaaaaatcac 240
 agactcattt taaaggagca gcaacctaac caatacaaa cttcatttga ttttaggttt 300
 agaaattcta gttttatatt ggagaatcac tcagttttta atatcaatta aaatagtcct 360
 caaaggaatg aagaggaagt ctaaataaat gaataaaact ctttttcat tttatggtag 420
 tatagaaagc attgatgtgt gtagagaaat taaaagacaa gagtgggtta ctgtctatgc 480
 acaaatgagt gcctatattt aaggctgcct ataccattac agtggcgtaa ttggtgattt 540
 catagcatac agagaaacaa tgaaatcaaa gattaaatca ttaggttatg atggtcattt 600
 gtaagattgg aaagtagtca aaaacccatg tgcaactttt tttcagcact ctaccattag 660
 gctccttagg caagctgctt aacttccgtc agaagcaaag gtgtgggaga acaccattca 720
 cctcagtagt aacttataaa aaccgtttta aagaaggaaa atgggccccca gcccttagg 780
 atccctgact ttctgatat tctaaacat gagaagtctt gggacttta ctggactctt 840

ttaccagaag taacgtggtg gatgnatatt aatcttttnc ccttgctttt gacccaaagt 900
cn 902

<210> 3373

<211> 862

<212> DNA

<213> Homo sapiens

<400> 3373

agcggcgggg agctggcggc agcggcgggtg gcggtggctg agcagaggac ccggcgggcg 60
gcctcgcggg tcaggacaca atgtttgcac gaggactgaa gaggaaatgt gttggccacg 120
aggaagacgt ggagggagcc ctggccggct tgaagacagt gtcctcatac agcctgcagc 180
ggcagtcgct cctggacatg tctctggtga agttgcagct ttgccacatg cttgtggagc 240
ccaacctgtg ccgctcagtc ctcattgcca acacgggtccg gcagatccaa gaggagatga 300
cgcaggatgg gacgtggcgc acagtggcac ccaggctgc agagcgggcg ccgctcgacc 360
gcttgggtctc cacggagatc ctgtgccgtg cagcgtgggg gcaagagggg gcacatcctg 420
ctcctggctt gggggacggc cacacacagg gtccagtttc tgacctttgc ccagtcacct 480
cagcacaggc accaaggcac ctgcagagca gcgcctggga gatggatggc cctcgagaaa 540
acagaggaag ctttcacaag tcacttgatc agatatttga aacgctggag actaaaaacc 600
ccagctgcat ggaagagctg ttctcagacg tggacagccc ctactacgac ctggacacag 660
tacttgacag gcatgatggg gggtgccagg ccggggccct gcgaagggt cgagggcttt 720
ggcttccggg caacccnng cccctanctt tcagcttgca aagttccgac ctggggccaa 780
acttgggacc acgttggtng gaaaaatccc tgggtgggaa gaacccttga gccagggaag 840
ccccttgant ngctttaaca ag 862

<210> 3374

<211> 749

<212> DNA

<213> Homo sapiens

<400> 3374

tggcccatga gatgattgga actcaaattg ttactgagag gttggtggct ctgctggaaa	60
gtggaacgga aaaagtgtg ctaattgata gccggccatt tgtggaatac aatacatccc	120
acatttttga agccattaat atcaactgct ccaagcttat gaagcgaagg ttgcaacagg	180
acaaagtgtt aattacagag ctcatccagc attcagcgaa acataagggtt gacattgatt	240
gcagtcagaa ggttgtagtt tacgatcaaa gtcaccaaga tgttgcctct ctctcttcag	300
actgttttct cactgtactt ctgggtaaac tggagaagag cttcaactct gttcacctgc	360
ttgcagggtg gtttctgag ttctctcggt gtttccctgg cctctgtgaa ggaaaatcca	420
ctctagtcct tacctgcatt tctcagcctt gcttacctgt tgccaacatt gggccaaccc	480
gaattcttcc caatctttat cttggctgcc agcgagatgt cctcaacaag gagctgatgc	540
agcagaatgg gattggttat gtgttaaag ccagcaatac ctgtccaaag cctgacttta	600
tccccgagtc tcatttctg cgtgtgcctg tgaatgacag cttttgtgag aaaattttgc	660
ccgtggttgg acaaatcagt agatttcatt gagaaagcaa aagcctncaa tggatgtgnt	720
ctaatacact gtttancgtg gatcttccg	749

<210> 3375

<211> 650

<212> DNA

<213> Homo sapiens

<400> 3375

ttttttaata gcatgtatgg ggttctgttc catgtctgtg ttgtggacat tccgcggcat	60
gaccgcgtga actgcacggt ggagctgcct cagggctgtc ggtcagggtg gtccagttag	120
gggtgactgc agccggtcag gtgggcgagg agaagggggg ctgccccttt cctacctgtg	180
cttgaggggc cggaggcagg tgctgcctgg cagagctgtg ttaccgtctt ggcctcgggg	240
tctggtccac actctgtgct cccagccttg aggctgcagt aggactctga tctcacctgc	300
cagaagagag gcggggccgc gtcctcctgg cgtcacgggc gtcactgtca ttccttggtg	360
tctgtgctgg gcatggttgg cttgggggtc tgtggtttcc tgggccttgt ggcagggttt	420

ctcccgtggg agaatttggt gtggaaagca taggaggccc cttccgaggt tgacaccgtg 480
 tcctccgcgg tgtttctcgc ctggctgtct cgtcgtgtgg acgctgccgt tctggttctc 540
 ggaggtgtgt ccttcgccgt gttgggggta tttgtctgng ttcctgcact tttcccgggc 600
 tctgagctgg attgatgggg ccaagtcnc ccccttccat cttgaggtcn 650

<210> 3376

<211> 707

<212> DNA

<213> Homo sapiens

<400> 3376

aactgaatgt gtcttaacct ctgtgttaca tcttggtgg cagagattta tgttacatga 60
 gattgtcttg gtagcttgta gtgtgggtcag gagaaagggg atggagcagt ggtgcatagc 120
 tgcttactgc tcttataaac ggtatataaa ggttttacgg attttgaaaa tttttttttt 180
 tagagggtcaa aataaatacc attttagtgg caacagcttt gaactagaga ggtagatgta 240
 ttaaagcagc atagaacat aacttctaga taatgtagtt gccactagga gatattagaa 300
 agttagaatg tatgtgtgta tttagttttt caataataat gaacatacac tttcaggagc 360
 aaagtatggt tgagaaattg tggcagaaag aattttaaat gttagtcgaa gttgtctgta 420
 gtttctttat taagctctga aaacacttcc aatgccagtt tgattctgag ggcttgggaa 480
 gtgggatctc ccttgtggag cagctggagc tggctgggag ggagcctctc catgggtaat 540
 ttattatgcc tgccctgctt cccccaggga gctgcttcag tgtgaaatga tgtgattgtc 600
 ggggggtgggg tgggaggang gccccttcag tcaggaggtt gctcacatat tacacaggta 660
 gcatcacgtg gacttcancg ctgactgtct agtagtgagt ccctgna 707

<210> 3377

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3377

```

actgagcgct cggggccttt tcaaatacggg atccgttacc gtttccccgg cagccgccat   60
tgtcgcgctc ggagccccctc agctcaggcg gccgaggcgg aggcagcggc ggcggggatgg  120
cggacgccaa caaggccgag gtgcccgggg ccactggtgg cgacagcccg cacctgcagc  180
ccgcagagcc gccgggcgag ccgcggcgag agccgcaccc cgcgaggcgg gagaagcagc  240
agccgcagca cagcagcagc tccaatggcg ttaaaatgga gaatgatgaa tcagcaaaaag  300
aagagaaatc tgacttaaag gaaaaatcta caggaagtaa gaaggccaat agatttcac  360
cttattcaaa agacaagaat tcgggcactg gagaaaagaa ggggtccaaat cgtaacagag  420
ttttcattag caacatccca tatgacatga aatggcaagc tattaaagat ctaatgagag  480
agaaagttag tgaggttaca tacgtggagc tctttaagga tgcggaagga aaatcaaggg  540
gttgtggtgt ggttgaattc aaagatgaag aatttgtaaa gaaagcccta gaaactatga  600
acaaatatga tcttagtgga agaccctta atattaaaga ggatcctgat ggagaaaatg  660
ctcgtagggc atgcancga acaggaggat cattttcagg angacacgtt ccttgatatg  720
ggatcanggg ttgatgaatt taccactttc atacttcaat aattccaaac att          773

```

<210> 3378

<211> 708

<212> DNA

<213> Homo sapiens

<400> 3378

```

gtgctacccc ctccccccgg gtgctggctc catgtctgtg tgaccggcct caggggtaga   60
gtccaggccc gacgcggggc gggccagcgg cggcggcagc tgaggtgaga gacggcggcg  120
gcggcgcggg caccgggccc ccagcgggga ggatgaagcg gcggaacgcc gactgcagta  180
agctccgccg cccctaaag cggaaccgga tcaccgaggg catttacggc agtacatttt  240
tatacctgaa attcctggtg gtgtgggcac ttgtcctcct agcagatttt gtcctggagt  300
tcagatttga atacctgtgg ccattctggc ttttcatcag aagcgtctat gattccttca  360
gataccaggg actggccttc tcagtatttt ttgtttgtgt agcattcacg tcaaatataa  420
tatgcctgct gttcatcccc atacagtggc ttttttttgc tgctagcaca tatgtatggg  480

```


ttcagtagct atggcacaca gaaaggggag tgtgtttgcc tacagtgtct ctctggatcc 540
tctttgntta tattgaagca gccattagat ttaaagatct caaaaacttt catgtagacc 600
tttgctgccc atttgctgct cactgtattg ggtaccctgt ggtaactttg gggtttggct 660
taaaagttac gtaagctaca aaatgcngnt aangaaacca aaagaagt 708

<210> 3379

<211> 710

<212> DNA

<213> Homo sapiens

<400> 3379

ctttgcagct gagactgggt ggagggagag gcgcggagac actggggctc tgacgagctg 60
gctgaggccc tctcagtagg ggggtcacgc ctcttggaaac tcagggaccc caagtttctg 120
tgcattcagg gcggggctgg ccccatgccc tgtgcatagg ggcctggctg catcccagtc 180
gatcagccag aggcagcagc agtggactca tcaattgtgg aggaagccct ggggaccctg 240
gggaccttgc cgactctatt cccagccagc tcctaggaca agcctcagag ccaacacccg 300
ctcgaccctc tcccggcccc tccccttctt tgtcttttgc agatgatcgc cgggtgtcga 360
tccttttccc tccagtcagg gccaggcgtg gacgccgccg gaccgctgag actcggggca 420
cgggtgaagca ctggccgggg tctggctggg tctggcgctc gggagccaga tggaggtggc 480
gatagggggc atgggagccg gcgccaagta gccggtggac ccccgcgctc gcacctctcc 540
cggcgccccg gcgctcccca aggctgccat ggaggtgcct aacgtcaagg actttcagtg 600
gaagcgctg gcgccactgc caaccgncgg gtctactgct ccctgctgga gaccgggggc 660
cangtctatg ccatcggggg atgtgacnac aacggcgctc ccatggactg 710

<210> 3380

<211> 758

<212> DNA

<213> Homo sapiens

<400> 3380

```

aaaaattacg cgaagatgct aagataccag cttgtgaaga aagcctaagc cagacccccgc 60
cgagggtgac agggaccagt cctgctcaag accaggatca tccatccgag gaacaggggg 120
ggcagggttc ctgtagagag ccagggtgta acccctgcct ctcccgtcta ggacgcctcc 180
agcagaagat gctgcttgcc tgcagagccc ccagcctgag gacacgggtg cagaaggagg 240
ggctgagtcc aagacgagct cagaaaacca gaagcctgaa actttatctg gaaacactga 300
aggtgccttc attagcagaa ctgcacagcc gcctctgaaa aggtacgtcc actcggcatg 360
gaggagtccg cgtcccttac ccagttaata agatcaatga atgcgcaggt ctttcttctt 420
ctagcttcca cccacaaata aaatgggttc aaaaagaaga tgcgtcatc ttaaagataa 480
gaataaggaa tgtaaaggac tacaagtgtc agtatattaag ggatagagtc gttttcagtg 540
ctngggtggg agacaaattt tacctggctg atctggagct gcggggcaac ataaggaaag 600
atgactgcca atgtgtgatt agaaacnatg aacctgtaat cactctggcc aaagagagaa 660
gggaggcatg gtgtcaccta ctcanacaga ggacccaac gtggcttttg atttgatca 720
ctgggaagac tgttgaaagg acagccactt nccaaggn 758

```

<210> 3381

<211> 719

<212> DNA

<213> Homo sapiens

<400> 3381

```

aactgatgca attgacaaac gtgtccaggc ctaaagcaga agatgcactg tctgaaatga 60
agtctcagta ttcaaaagtg ttgaatgagt tgaccagct naaacaactg gtggatgcac 120
aaaaagagaa ctctgtctct atcacagaac atttgcaagt gataaccacg ctgcggactg 180
cagcaaaaga gatggaagaa aaaataagca atcttaagga acaccttgca agcaaggaag 240
tggaagtagc aaagctggag aaacaactct tagaagagaa agctgctatg actgatgcaa 300
tggtacctcg gtcttcctat gaaaaactcc agtcacctt agagagtga gtagtgtgt 360
tggcatcgaa attaaaggaa tctgtgaaag agaaagagaa ggtccattca gaggttgtcc 420
agattagaag tgaggtctca cagggtgaaa gagaaaagga aaatattcag actctcttga 480

```

aatccaaaga gcaagaagta aatgaacttc tgcaaaaatt ccagcaagct cangaagaac 540
 ttgcagaaat gaaaagatac gctgagagct cttcaaaact ggaggaagat aaagataaaa 600
 agataaatga gatgtcgaag gaagtcacca aattgaanga ggccttgaac agcctcttcc 660
 agctctccta ctcaacaagc tcatccaaaa ngcagagtca gcagcttga ngcgctgca 719

<210> 3382

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3382

acatgcctcc ccagcccccg ctctgacgat gatggccacg cagaatgtcc cgccccacc 60
 ctaccaggac agcccacaga tgacggcaac cgcccagcca cccccaagg cccaggctgt 120
 ccacatctct gccccctcag ctgctgccag cacacctgtg cccagtgtcc ccatcgacc 180
 ccaggccccag ctggaggctg acaagcgagc tgtatacagg caccctcttt tcccgtcct 240
 gagctgtctg tttgagaaat gtgaacaggc caccagggc tctgagtga tcacctccgc 300
 cagctttgat gtggacatcg agaactttgt ccaccagcag gaacaggagc acaaaccctt 360
 cttcagcgat gaccagaac tggacaatct gatggtgaag gcaatccagg tcctgagaat 420
 ccacctgctg gagctggaga aagtcaatga actctgcaag gacttttcta accgttacat 480
 cacctgcttc aaaaccaaga tgcacagcga caacctgctc aggaatgatc taggggggcc 540
 ctactcccc aaccagccct ccatcaacct tcaactcag gacctcctgc agaattcccc 600
 caattccatg tccggagtct ncaataacct ccaggggatt gtggtcccag cctcagcgt 660
 tcagcagggc aacatcgcca tgacaaccgt caacttaca gttgtgtcan gtggagcctt 720
 atccaaccgg gtaccatggt aaccttccan ggtcangtgg tcaccaagc aat 773

<210> 3383

<211> 814

<212> DNA

<213> Homo sapiens

<400> 3383

```

ggggcggaga gaggcgagca ccgggaaggg gagcgtgggg ccgctggaat gggatgaattt   60
aaggtccatc gagtacgttt ctttaattat gttccatcag gaatccgctg tgtggcttac   120
aataaccagt caaacagatt ggctgtttca cgaacagatg gcaactgtgga aatttataac   180
ttgtcagcaa actactttca ggagaaattt tccccaggtc atgagtctcg ggctacagaa   240
gctttgtgct gggcagaagg acagcgactc tttagtgtg ggctcaatgg cgagattatg   300
gagtatgatt tacaggcggt aaacatcaag tatgctatgg atgcctttgg aggacctatt   360
tggagcatgg ctgccagccc cagtggctct caacttttgg ttggttgtga agatggatct   420
gtgaaactat ttcaaattac ccagacaaa atccagtttg aaagaaattt tgatcggcag   480
aaaagtcgca tcctgagtct cagctggcat ccctctggta cccacattgc agctggttcc   540
atagactaca ttagtgtgtt tgatgtcaaa tcaggcagcg ctgttcataa gatgattgtg   600
gacaggcagt atatgggcgt gtctaagcgg aagtgcacg tgtgggggtg cgccttcttg   660
tccgatggca ctatcataag tgtggactct gctgggaagg tgcagttctg ggactcaacc   720
actgggaccc ttgtgaagag ccatctcacc gnttatgctg acgtgcagtc cattgctgta   780
ncttgaccaa gaagacngtt tctggtgggc acaa                               814

```

<210> 3384

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3384

```

aggcggtagc cggacgggtt cgtcccgggc tgtttcgcgt ccggcctgag gcggctgggg   60
ccgcgcaggt agtgtccctg cacttcttgc ccgggcgcgt gaggccagct ccgctgcgct   120
ggcctccagc ttccagccct cctcccctaa gccgccgcca tcatgctgct gcctgtgttc   180
accctgaaac tgcgccacaa aatcagcccc cgaatggtgg ccatagggcg ctacgacggg   240
actacccggt gcctggcggc cgccacccaa acgggcaagg tttttattca taatcctcat   300
acacggaacc agcatgtcag tgcattcagg gtcttcaga gccccctggg atctgatgtt   360

```

tctcttctca acattaacca ggcagtcagc tgtctgactg caggcgtatt gaaccctgag 420
 cttggctatg atgccctttt agtggggaca cagactaatc ttttggctta tgatgtctac 480
 aataattcgg atttgttcta cagagaggta gcagatgggg caaatgcagt tgtgctgggg 540
 acattggggag acatttcttc ccctcttgcg attattgggtg gcaattgtgc tctgcaagggt 600
 ttcaatcatg aaggaagtga tctcttttgg acggttactg gagacaatgt taattccttg 660
 gccttgcgtg actttgatgg tgatggaaaa gaaagagctt cttgntggat ctgangattt 720
 tgatatccga gtttttaaag gaagatgaaa attgtggcan aaatgaccga aac 773

<210> 3385

<211> 754

<212> DNA

<213> Homo sapiens

<400> 3385

aggccacata ggttttcaga gactcgcctg gcagaggcct ggagcgtcct gctgcgtgga 60
 ctgtgggcac cgagccacca ggaggttggt gatctcattc ttgctcactg gtccctgcca 120
 gactgggtgt gcctctctac tgctgggcag cccacctct gtgctgcccc atccacctac 180
 agccctcatg cctgggcca gctggagggt ctgacagggg cccctgggg tggcatgcgg 240
 acccttcagg gtgccccagg cgcagcacag gtctccagag acacaggcac cagggcgttc 300
 agagctagtc ccctcgctgc tgttgactgt ccttgagcag cccagggcc ggtttctcaa 360
 cctcatttgc tcacctgagc aatgaagtga ggtgggctcc tggaactgca gcagccaccc 420
 cccggggcca tcgtgaggct aagaatccag tgcagggtga gcaaccagcg accgctacaa 480
 ggacagtga gagctagcac caggaccttg ggtagccac ccgctggagg gagcgtgtgc 540
 tgcaaaaagc aagagtgggc tttggaggcc aacggatgga gcggattcag tctgaggctg 600
 ttccagccct tgcttaggat ccacctacct aggtctggaa atcgatttct acttcagatg 660
 ccttctcaga ggataaaata acccccgggtg ggggagagta ctggaagang gctaattccc 720
 ctggttttct tcccatgagc attaatgnca agng 754

<210> 3386

<211> 884

<212> DNA

<213> Homo sapiens

<400> 3386

```

aataagactc tatcaagatc catagcatct gaagttgtag ccaggcctgc ttcattgtct 60
aatgataaac tgatggaaaa gtcagagccc gttgaccagc gaagacatac tgcaggaaaa 120
gcaattgttg atagtagatc agctcagccc aaagaaacct cggaagagag aaaagctcgt 180
ctgagtgagt ggaaagctgg caaaggaaga gtgctaaaaa ggccccctaa ttcagtagtt 240
actcagcatg agcctgcagg acaaaatgaa aaaccagttg ggtctttttg gactaccatg 300
gcagaagaag atgaacaaag attatttact gaaaaagtaa acaacacatt ttctgaatgc 360
ctgaacttga ttaatgaggg atgtccaaaa gaagatatac tggtcacact gaatgacctg 420
attaaaaata ttccagatgc caaaaagctt gttaagtatt ggatatgtct tgcacttatt 480
gaaccaatca caagtcctat tgaaaatatt attgcaatct atgagaaagc cattctggca 540
ggggctcagc ctattgaaga gatgcgacac acgattgtag atattctaac aatgaagagt 600
caagaaaaag ctaatttagg agaaaatatg gagaagtctt gtgcaagcaa ggaagaagtc 660
aaagaagtca gtattgaaga tacaggtggt gatgtagatc cagaaaaact ggaaatggag 720
agtaaacttc atagaaattt gctatttcaa gattgtgaaa aagagcagga caacaaacca 780
aaggatccac ccatgatgtt aaacccccaa tncagaaacn aggacaagtt gcttaaatta 840
aatntaaggg gctctacgcc atacttgcaa agtgtgaaaa aaaa 884

```

<210> 3387

<211> 817

<212> DNA

<213> Homo sapiens

<400> 3387

```

attcatcata gaagaacttt aaaattttga aaagcatgcc atattagagt aagaataacg 60
agttgtttac agtactttct gtagagtaat tagcttagaa aactttctca gggtttctgc 120

```

ttgctctgtt atttttccac ctagaagaat agtaaaaagg aagtgctagc tgtggtttgg 180
 tttgaacaga ccaacagcag agatgagatg aggagactgg aaagtaaagc ccagtagtat 240
 tgggtgaattt taggagcttt cgtttgaaga gttatcgttc cttgattagg ggatgtgacc 300
 aaggaattac caactttaaa ggtggtcaca gaattagggc ttataaatgg acttctttca 360
 gatgacattt ttctttgtga gacctgatca ggaaaataag tacagctttc atttcttgat 420
 tgtccttctt aataatatct tagagtttca ataataatta gcttgctttc gaatatctgg 480
 acttagacag tcttagcctt tggcctctca agggctctaa atctctatgc acaattttgt 540
 gttttcattt tgggtgtggaa aatctttgta aattttatcc tattgtcaga gtagtcatag 600
 aaccataaaa ggataaagaa gcctgatcta gatctttgct gctgcttcag agaatctttt 660
 cagagagaaa taaatgagtt gaatatcttt caagactaac attttctgaa actttaagaa 720
 gaaaaaattt tctaacattg tgaacaggat taagtagcta ttttattaaa tgctttggat 780
 ttttaantgga ggnagttttt ttgnaaaccc ccgggaa 817

<210> 3388

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3388

atcagatgtt gggaccctta agtgttctgc acctggggag agttaggaac cacttaagga 60
 gtgtctgttg cttgccaatc ttaaaatttt tagtttgcac ctgaatcagg ggctgtcaga 120
 gtccagactg ctcttgaaat agaaaagact ggtcgttaaa ggcagggttcg ttgagtcttt 180
 catcgttgag tgataccacc tctgcagatg gctcagtggg gcagccccgt accacagcct 240
 gcccttgagg ttgtgtagtt tagataggtc acagagttgc tgggcctacc gcaggtctcc 300
 tgaccctggg gcagttttac ttcaattaca accaccaaaa tagctacagt caaaaattcc 360
 aaagtcccta caccatcaac ctccacccca ctccgtcca aagtccactt agaggctctc 420
 agttttggac cttagaaaca cttagggagc tttttaaaaa gatcgattct gtatttttag 480
 tagagatggg gtttcacca gctactcagg aggctgaggc aggagaatca cttgaaccgg 540
 ggagttggag gttgcagtga gccgagatta tgtcactcca gcctgggcaa cagagtgaga 600

ctccgtctta ggaaaaaaaa aaagattgat tctggccggg cacagtggtt cacgcttaca 660
gtcccagcac tttagagagac tcangcagga ggatcacttg agcttaggag tttagagacta 720
gcctgggcaa ccantgaga ccccgatatct acaaaaatta gccaggtgtt gtgacatgtg 780
cctgtggtcc cagcttcttc aanaggctta ngt 813

<210> 3389

<211> 768

<212> DNA

<213> Homo sapiens

<400> 3389

ggaaatatgt atcgtctccc tgccaccag gaggtggtga cgcagctgca gagccagatc 60
ttggagctgc agggggagct gaaggagttt aaaacttgta ataagcaact tcaccaaaag 120
ttaattctgg ctgaagcagt gatggagggg aggccaacgc ccgacaaaac gttgctgaat 180
gctcagcccc ctgtgggagc agcctaccag gacagcccag gagagcagaa aggaattaaa 240
accacatctt ctgtctggag agacaaggaa atggacagtg atcagcaaag aagctacgag 300
attgactctg agatttgccc acctgatgac cttgccagct tgccatcatg caaagaaaat 360
cctgaagatg ttctgagccc aacttcagta gctacttacc tgagttccaa gagtcagcct 420
tctgctaaag tcagtgtgat ggggactgat cagtcagaga gcattaatac ctcaaagag 480
acagaatact taaaacagaa aatccatgac ttggaaactg agctggaagg ctaccagaat 540
ttcatatttc agcttcaaaa gcactcccag tgcagtgagg ccataattac agttttgtgt 600
gggacagaag gggcccagga tggcttgagc aagccaaga atggttctga tggggaagaa 660
atgacctttt caagtttgca ccaagtgcga tacgtgaaac acgtgaaaat cctcggtccg 720
ntggccccc anagatgattga cagcagggtg ctggagaacc tnaaacag 768

<210> 3390

<211> 871

<212> DNA

<213> Homo sapiens

<400> 3390

```

ccccgccttc tcgctgcccc gccccgggga gggaggcggg gccgcgaccc cggcgcggggt   60
ggggcgaaatg cgttcccagc gggtagcctg gggctggtgc agagtccaa gccacaggcc  120
ccggtcgcgg cctcgccgcc ctcccgcgcc ccgcgccggg agcgggccta gagcgctcgc  180
ctgccccctc cgcgagcagg gctctggcgc ccgccctgt ccgcaccgnt ggcagcctga  240
agagagtcgc tggccgtggt cgccgctagg taggatatat ctgcatcttg aaaggaagat  300
aaaacaaaag ccttctttgg aatagatgga ttttgtcac tttctgtgtg aactaaagtg  360
attcaatgtc tcttttgat tgcttctgca cttcaagaac acaagttgaa tcactcagac  420
ctgaaaaaca gtctgaaacc agtatccatc aatacttggt tgatgagcca accctttcct  480
ggtcacgtcc atccactaga gccagtgaag tactatgttc caccaacgtt tctcactatg  540
agctccaagt agaaatagga agaggatttg acaacttgac ttctgtccat cttgcacggc  600
atactcccac aggaacactg gtaactataa aaattacaaa tctggaaaac tgcaatgaag  660
aacgcctgaa agctttacag aaagcccgtg attctatccc actttttccc ggcatcccaa  720
tattacaact tattggacaa gttttcactg ttggcagctg ctttgggtta tttctcatta  780
tggtctatggt taacaagtca actnttgagg actattttct gaagaatgat gaaacttaat  840
anaacatctc tttgagccta naggttgact t                                     871

```

<210> 3391

<211> 890

<212> DNA

<213> Homo sapiens

<400> 3391

```

actcagctgt gcgctctgat ttcgtgcgt tctcgtcct tcatgttgga tggccagttt   60
ttcgtttgtg cgtcatcctc tacctgagaa atggtcgctt gccccctagtc tagacacgca  120
ttaaagggca gtatttaaag tcagttggca agcagtgga taagattttt gtaaagaaac  180
cttgtgcagc atggattctc taccagatga atttttgtg aggcaccttg ctgtggagga  240
tcagaggaag gaagaaactg agaataagct agaaaaatca tcttgtcaac tgaacaaaca  300

```

ggaaaatgac atacctactg atcttgtccc tgtaaccta ctattagaag tgaagaagtt 360
 attaaatgca attaatactc taccaaaagg tgtggttcct cacattaaga agttcttaca 420
 agaagatttt tccttccaaa ctatgcagag agaagttgca gctaacagcc agaatgggtga 480
 ggaaattggt cctgctttga ctttacgttt ctgattaca cagctagaag cagcacttag 540
 gaacattcaa gctggcaatt ataccgcaca ccagattaat attggttatt atttgacatt 600
 actgntttta tatggagtag cactcactga aagaggaaag aaagaggatt atacagaagc 660
 tgagaataaa tttctggtga tgaagatgat gatccaagaa aatgaaattt gtgaaaactt 720
 tatgtcttta gttattttgg acgtggntta ctgcatgtg ctcaaaagag atntaatgga 780
 ggactgctag aatttcataa aagcttacag gaaattggag acaaaaatga ccattgggtg 840
 acatagatcc tacngaagat gaagatttac ctacactttt aagacttctt 890

<210> 3392

<211> 723

<212> DNA

<213> Homo sapiens

<400> 3392

gtgaagatgg cggcagtggt ggaggtggag gttggaggtg gtgctgctgg ggaacgggag 60
 ctggatgagg ttgatatgtc agatctctct ccagaagagc aatggagggt cgagcacgca 120
 cgcattgatg ccaagcaccg tggccatgaa gctatgatg ctgaaatggt cctcatcctc 180
 atcgcaacct tgggtgtggc ccagctgctc ctggtgcagt ggaagcagag gcacccacgc 240
 tcctacaata tggtgaccct ctttcagatg tgggttgttc ccctctatct cacagtgaag 300
 ctgcactggt ggaggttcct agtgatctgg atcttgttct ctgctgtcac agcctttgtt 360
 accttccgag ccacccgaaa acctctagta cagacaaccc caaggttggg ttataagtgg 420
 ttcttgctaa tctataaaat cagctatgcc actggcattg ttggctacat ggctgtcatg 480
 tttaccctct ttggtcttaa cttattattc aagatcaaac cagaagatgc catggacttt 540
 ggcatctccc ttctcttcta tggcctctac tatggagttc tggaacggga ctttgcagaa 600
 atgtgtgcag actacatggc atctaccata gggttctaca gcgagtcggg catgcctacc 660
 aaacatcttt canacagtgt gtgtgctgtg tgtgggcanc agatctttgt ggacgtcant 720

gaa

723

<210> 3393

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3393

```

gttccctgac tcggagtctt agtgtgtcgt tatttggaca agaggcacat tgacccaatt 60
tggagacgta ttttgaagg aggtgtgaaa aagacagcat gaactttacc ccaacacaca 120
cccctgtctg cagaaagcga acagttgtct ccaaactggg tgttgccgtc agtgggtcca 180
ccaagaggag gggaatggca gattcactgg agtcaacccc cttgccttcc cccgaagatc 240
gtctggccaa actccatcct tctaaggagc tcctggaata ttatcaaaag aagatggctg 300
agttgtgaggc agaaaatgag gacttgcctg agaaactgga actctacaaa gaagcttctg 360
aaggacagca taaacttgaa tgtgatttgc agcagaggga ggaagagatt gctgaattgc 420
agaaagctct aagtgatatg caggtctgcc tcttcagga acgggaacat gttttacgcc 480
tctactcaga aaatgaccga ctgagaatca gggagctaga anacaagaaa aagattcaga 540
atctcttggc tcttgtggga acagatgctg gagaagtac ctatitttgt aaggagcctt 600
ctnacaaagt caccattctc caaaagacta tccangctgt angtgaatgt gagcagagtg 660
aatcttcagc tttcaaagca gatcctaaaa taagcaaaag aagaccatcn agagagagaa 720
aagaaagtct tgagcattcc aaagagacat acagacactt catcctacag gtggnaaccc 780
ttgcaggctc aacttgggaa aaccnga 807
    
```

<210> 3394

<211> 778

<212> DNA

<213> Homo sapiens

<400> 3394

ttgtaataat actgtatgtt tatctttggc agctccaaaa gttctgtagt ttttacttca 60
 ggccttttagt ttgaaaacta tgagtttttt caggttggtg aagcatcatc aatgattttt 120
 taatgactga gagaattgtt atttatataa tgatcttagt acttaacatg tggtttccaa 180
 tgccagtgac ggcagttctc agcagagaaa ttaacttttc cattaagcta taatgaaaag 240
 aatcaataac ccttacttaa tcagatatct ataataccta ctgcagttgt tctcatttgt 300
 attttaatac attacaagtt agtctgtaat ataatttaat gcatagcaag ttagtctgta 360
 gtataatagt agttattgat ggttactcat ttttttaata acgtagtaaa atacactaac 420
 aatattttca tccaaaaata aattcaaggt gtaaatacagc atatcttttt caacttgga 480
 tttatattct gccatgttgc tccaaagctt gttcacagtt aagacacaag atcgttggga 540
 aatcttatac tatacctctg atgagcatta ttacactttt tctgaaagca ttcttctttg 600
 gtagtctgat tacaccttcc taatcttttt cttctatcta cttcattcat ttnttttttt 660
 ctgcaactac tactttactt atacttataa actctgcatg acccggactt tgcattctct 720
 gnattacctt tgctaagtac atctgagtag cataccngga aaatantttt tttccaga 778

<210> 3395

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3395

tgtatagatg ttaagtgttt catgtgggtt ttgtgtcatt gctattttatc aatagcaata 60
 attttgcaact gaaaactttt tatagttcaa aaattaagca tggactcccc agtatacttt 120
 aactttcttt ctttcttttt ttttttttgg agacagagtc tcaactgtcac ccaggctgga 180
 gtgcagtggc atgatctcag tttatgcaac ttctgcctcc ccaggttcaa gcgattcttt 240
 tgcctcagcc acctgactag ctgggattgc agcctgcacc accacacctg gctaaatttt 300
 tgttgttgtc gttgagatac agtttcactc tgtcaccag gctggagtgc agtggcatga 360
 tctcagctca ctgcaacctc tgccttctgg attcaagtga ttcttgtgcc ttagcctccc 420
 aagtagctgg gattacaggc gtgcaccacc acgcccagtt gatttttgta tttttgatag 480
 agacggagtt tcaccatgtt ggccaggctg gtctcgaact ctgggttcaa gaaatcctcc 540

caccttgcct cccaaagtgc tgggattaca ggtgtgagcc accacgcatg gccctgaacc 600
 ttctcttttt aggaatacca aagttttcaa ctttttcagc tttagaattt gtaaattttt 660
 ttgtagaata tcatatgact gtaattncag agtggtccaa cttgggttatg atatatttgg 720
 gtaaattttac aactgntctt ttatttgcca taatctgggt ataacactgg ttgtggnagg 780
 gaaaggaaaa cntgcaaac attc 804

<210> 3396

<211> 646

<212> DNA

<213> Homo sapiens

<400> 3396

gaagatggcg gactcgggtg ctagccgatg aggaggccgc ggggggaacc cggcccccg 60
 gccccgagac cgactgaggg agcgacctgc gcagggcccg gggagtcag taggggtggc 120
 gcctgcgggg agggctgcgg gagggcagcg ggagctggtg ttagcggcag cggccacggt 180
 ctcttgccgt ccctgggccc ggggtgggtgt tggggccccc gacttcgccg actccgcgcc 240
 atcgcaaagc ggtgcactcg ggctccacgc gcgccctgca aggtgggcgc tgcgttttca 300
 tttcacgggt gaggagactt agagagacga agccacttgt ccaaggtcac gccgctggtg 360
 agtgggagcg cccagcatgg aaccacgac cgtccagccg cggagcccgc gttccaccct 420
 ctgtgccgcc gccgcctcct gtgggagagg gaggtggtcg ggagagtga cggcggtgcc 480
 gnetgggctc cagactgggc gcgaccacta acccggttaa tgacctcggg cttaacttaa 540
 ccccttcgct gctctgggcc tgcgtttctc caccggtgaa atnagggtct tcatcaccca 600
 acttcatgct tcnagtctg ctctctgctc anaccttccc tgctcg 646

<210> 3397

<211> 802

<212> DNA

<213> Homo sapiens

<400> 3397

```

gtcagtcctcc gcgcttttcg gaggtctgcca gcgtcccaca ccagccgcag gtgaaaaccg    60
gcagaaagac  attaagagat tttcctgcag tcaactgctgg cagatgatag agccaggatt   120
tgaaagcagg  cagcctggct ccagaccctg tgctcttaac tcccgttttg catcaagaac   180
agaatcctat  gaaaggcttg tacagtgcct ggatagcagc atcaaggagc atttgtgtaca   240
tgcagaagtg  cacagtacct ggagtgaac  tgcttggtgt cgatttctga taccattcat   300
aactggctgt  gtgatctcaa aacctctaaa atgcagacct ccagctctag atctgtgcac   360
ctgagtgaat  ggcagaagaa ttacttcgca attacatctg gcatatgtac cggaccgaag   420
gcagatgcat  accgtgcaca gatattacgc attcagtatg catgggcaaa ctctgagatt   480
tcccaggtct  gtgctaccaa actgttcaaa aaatatgcag agaaatattc tgcaattatt   540
gattctgaca  atgttgaatc tgggttgaat aattatgcag aaaacatttt aactttggca   600
ggatctcaac  aaacagatag tgacaagtgg cagtctggat tgtcaataaa taatgttttc   660
aaaatgagta  gtgtacagaa gatgatgcaa gctggcaaaa aattcaaaga ctctctggtg   720
gaacctgctc  ttgcatcant ggtaatncat taaggagggc cctggncctt gaaccttctt   780
aaaatttaat  ggtttggggg ta                                     802

```

<210> 3398

<211> 733

<212> DNA

<213> Homo sapiens

<400> 3398

```

gcgccccggc  cgggccactg ggccacaggc cacgcggcca cgcagtcgga gcgggagccg    60
agccggggcgg  ggcgagggca gctccgcctg gctcccacca tgagtgtctga gcttaacgtg   120
cctatcgacc  cctctgtctc tgcctgccct gagcccggcc ataagggcag ggattaccgg   180
gactgggtcc  gccgcagcta cctggaactg gtcacctta accaccactc ggtacaggcc   240
ctgtcgtggc  ggaagctcta cctgagcagg gccaaactga aggcctccag caggacctcc   300
gccctcctct  ccggctttgc catggtggcc atggtggagg tgcagctgga gacgcagtac   360
cagtaccgcg  ggccgctgct gattgccttc agcgctgca ccacggtgct ggtggccgtg   420

```

cacctgttcg ccctcctcat cagcacctgc atcctgcccc atgtggaggc cgtgagcaac 480
atccacaacc tgaactccat cagcgagtcc ccgcatgagc gcatgcaccc ctacatcgag 540
ctggcctggg gcttctccac cgtgcttggc atcctactct tcctggccga ngtggtgctg 600
ctctgtctga tcaagttcct ccccggtgat gcccggcgcc agcctggccc cccacctggc 660
cctgggagta cacgggctgg cangccgcct ggtgtccacc attatcatgg tgccgtgggc 720
ctnaacttcg ngg 733

<210> 3399

<211> 716

<212> DNA

<213> Homo sapiens

<400> 3399

tgaggcgcgagg gaggcccgcg ccccgcggtc cgctgtgcgt gggaggcgcg gagcgaacgc 60
gggcgaggag cggccgagcc gctgaagagg agctggcgcg cggccgcccc gccgcgctcg 120
gcccgcggat cgcctccgcc cggctcttcgc cggccccggc ccctggcgag atgccgtgtg 180
gggaggattg gctcagccac ccgctgggaa tcgtgcaggg attcttcgcc caaaatggag 240
ttaatcctga ctgggagaag aaagtaattg agtattttta ggaaaagctg aaggaaaata 300
atgctcctaa gtgggtacca tcaactgaacg aagttccctc tcattatttg aaacctaata 360
gttttgtgaa atttcgttgc atgattcagg atatgtttga ccctgagttt tacatgggag 420
tttatgaaac ggtaaccaa aacacaaaag cacatgttct tcatttttga aaatatagag 480
atgtagcaga gtgtgggcct caacaagaac ttgatttaaa ctctccacga aataccactt 540
tggaagaca gactttctat tgtgttccgg tgcctgggga atctacgtgg gtaaaagaag 600
cctatgttaa tgcaaacc aa gctcgagtca gtccctcaac atnctacact tctagtcgcc 660
acaagangag ttttgaagat gatgaccatt ttggacctcc agccccaatt angcag 716

<210> 3400

<211> 711

<212> DNA

<213> Homo sapiens

<400> 3400

```

gagcatgtgc acgctggcca gctctgagtt ctcccatgag gctgtcaaga cgcacatcga 60
gacgggtcatc aacgccctga agactgagcg ggacgtgagc gtgcggcagc gggccgtgga 120
cctcctctac gccatgtgcg accgcagcaa cgccccacag atcgtggccg agatgctgag 180
ctatctggag acagctgact actccatccg agaagagatt gtgctgaagg tcgccatcct 240
ggctgagaag tacgcgggtg actacacctg gtatgtggat accatcttga acttgatccg 300
aattgctggt gattacgtga gtgaagaggt gtggtaccga gtcattcaga tcgtcatcaa 360
ccgggacgac gtgcagggct acgcggccaa gactgtgttc gaggtctctc aggcctccgc 420
gtgccacgag aacctggtca aagtgggcgg ctacatcctg ggggagtttg gaaacttgat 480
agctggagac ccgagatcca gcccgctgat ccagttccac ctgctgcact ccaagttcca 540
cctgtgcagc gtccccaccc gcgcgctgct cctgtcacct acatcaagtt cgtgaacctc 600
ttcccgagg tgaagccac catcaagacg tgctgcgcag cgacagccag cttangaacg 660
cagacgtgga gctgcaacaa cgtgctgtgg agtacctgcg gntnaacacc g 711

```

<210> 3401

<211> 846

<212> DNA

<213> Homo sapiens

<400> 3401

```

gtcgccatgg cctccgtcgc ccaggagagc gcgggctcgc agcgccggct accgccgct 60
cacggggcgc tgcgcgggct gctactgctc tgctgtggc tgccaagcgg ccgtgcggcc 120
ttgccgcccg cggcgccgct gtccgaactg cacgcgcagc tgcgggcgt ggagcagctg 180
ctggaggagt tccgccgga actgcagcag gagcggcctc aggaggagct ggagctggag 240
ctgcgcgcgg gcggcgggcc ccaggaggac tgcccgggccc cgggcagcgg cggctacagc 300
gcaatgcctg acgccatcat ccgcaccaag gactccctgg cggcggggtgc cagcttcctg 360
cgggcgcccg cggccgtgcg gggctggcgg caatgcgtgg cggcctgctg ctccgagccg 420

```


cgctgctccg tggccgtggt ggagctgccc cggcgccccg cggccccggc agccgtgctc 480
 ggctgctacc tcttcaactg cacggcgcg cggcgcaacg tctgcaagtt cgcgctgcac 540
 agcggctaca gcaagctaca gcctcagccg cgcgcccggac ggcgcccggc tggcaccgcg 600
 cgcgcctcgc cccggcagga aaaggatgcg ccttcactta gcaaggctgg gcaagatgtg 660
 gttctgcatc tgccacagaa cggggtgggt ctagacggcc gcgaaagcac agatgaccac 720
 gccatcgtcc aatatgaagt ggggcacttc tgcaggggga cccgtcagt gacattgaag 780
 gngncttcaa tcaaggaacc ctgaagcttg tcccacctta caggganggg aaccttcaac 840
 ctttca 846

<210> 3402

<211> 857

<212> DNA

<213> Homo sapiens.

<400> 3402

ttgcaataca gaagagtgtc taaaaactgg atcacctggc aaaaaggaag agaaggccaa 60
 gaacaaagaa tcactttgca tggaaaacag tagcaacagc tcttcagatg aagatgaaga 120
 agaaacaaaa gcaaagatga caccaactaa gaaatacaat ggtttgagg aaaaaagaaa 180
 atctctacgg acaactgggt tctattcagg attttcagaa gtggcagaaa aaaggattaa 240
 acttttaa atactctgatg aaagacttca aaacagcagg gccaaagatc gaaaagatgt 300
 ctggtcaagt attcaggagc agtggcctaa aaaaacgctg aaagagcttt tttcagactc 360
 tgatactgag gctgcagctt cccaccgca tcctgcccc gagggagggg tggcagagga 420
 gtcactgcag actgtggctg aagaggagag ttgttcaccc agtgtagaac tagaaaaacc 480
 acctccagtc aatgtcgata gtaaaccat tgaagaaaa acagtagagg tcaatgacag 540
 aaaagcagaa tttccaagta gtggcagtaa ttcagtgtc aatacccctc ctactacacc 600
 tgaatgcct tcatcagtca ctgtaacaga aggcagccgg cagcagtctt ctgtaacagt 660
 atcagaacca ctggctcaa accaagaaga ggttcgaagt atcaagagt aaactgatag 720
 cacaattgan gtgggatagt gttgctgggg agctccaaga ccttcagtct gaaaggaata 780
 gctcgccagc aggttttgat gccngtgtga gctcaagcag tagtaatcag ccngaccaga 840

cattctgnaa aagctgt

857

<210> 3403

<211> 808

<212> DNA

<213> Homo sapiens

<400> 3403

```

gactgctgtg ctagcaatca gggagactcc gtgggcgtag gaccctctga gccaggtgca 60
ggatataatc tcgtggtgcg ccgtttttta agccggttgg aaaagcgcag tattcggtg 120
ggagtgaccc gattttccag cttttgctgc ttattcctct atctcacggg ttttgcacag 180
aaccaagagg cagtctctcc actgaatcaa tgaagaaaaa gaaaaggaaa agaaagcaca 240
ctattggaat cctaggaggc agattccagt tcttcttaac tgaacgattg gcaggcctcc 300
attgcttttg tggttgggaa ccagattgaa gatgatcttc tcatccaagc ccttaccgtg 360
gctgtccagg tccctcagcg taaactcttc agtatggtgt cgtggcaaga cattctccag 420
cagattaatg aaataaatac acttgttgga tctgcttcat ctaaaaaggc aaaaaaacct 480
gtaggtggta atgctccttt atattatgag gtatagtcag tcctgaccaa aattaanaag 540
gaaaatatca gcagtcattc aaaaccaact gaaatgttct cgatgagaga gttctacgtg 600
taccatagat gccaagattc tcccagttgt gactaaatct gatacacaat tcctgatatg 660
aaactcattt tttaaacagt gccttgaatt aatagtcaat ttaatagaat tgtaagccct 720
tatattgggg ggtggccctt gtcagaatga aaaatggaaa actcatgctt cagagatagg 780
tncaaatnat atgtgaaaac ntttaaga 808

```

<210> 3404

<211> 874

<212> DNA

<213> Homo sapiens

<400> 3404

gagcagaatg. caaaccaccc acaccggatt gaaatacaga acatittttga ggaagcccag 60
 tccctcgtga gagagaaaat tgtgccattt tataatggag gcaactgcgt aactgatgag 120
 tttgaagaag gcatccaaga tatcattctg aggctgacac atgtttaaacc tggaggaaaa 180
 atctccttgc ggaaagcaag gtatcacact ttaacaaaaa tctgtgcggt gcaagagata 240
 atcgaagact gcatgaaaaa gcagccttcc ctgccgcttt ccgaggatgc acatccttcc 300
 gttgccaaaa tcaacttcgt gatgtgtgag gtgaacaagg cccgaggggt cctgattgca 360
 cttctgatgg gtgtgaacaa caatgagacc tgcaggcact tatcctgtgt gctctcgggg 420
 ctgatcgtg acctggatgc tctagatgtg tgcggccgga cagaaatcag gaattatcgg 480
 agggaggttag tagaagatat caacaaatta ttgaaatata tggattttgga agaggaagca 540
 gacacaacta aagcatttga cctgagacag aatcattcca ttttaaaaaat agaaaaggtc 600
 ctcaagagaa tgagagaaat aaaaaatgaa cttctccaag cacaaaaccc ttctgaattg 660
 tacctgagct ccaaaacaga attgcagggt ttaattggca gttggatgaa gtaagtcttg 720
 aaaaaaaccc ctgcatccng gaagccagga gaagagcatg atcgaggatgc aaactctgat 780
 cacatatatt gacttgaagg aggccttgag aaaaagnaaa gcttgtttgc ttgtgangag 840
 cacccatcca ttaagccgtn ttgaacgtcc ttgg 874

<210> 3405

<211> 887

<212> DNA

<213> Homo sapiens

<400> 3405

ttatgctgca ctttgttgtg aaatcaagaa attaaaatat gaggctgaaa ctaaatttta 60
 caatggcttc ttgttttatg gagaaggagc tacagatgcc agcatgggtg aaggtgattg 120
 ccaaattcaa atggggagat ttatttcatt cttacaggaa ctgtcttgct ttgttacgag 180
 gtgctatgaa gtggatgata acgtagtcca ccagttggct gccctctata tcagtaacaa 240
 gattgcaccc aaaattatag agacaactgg agttcatttt cagactatgt atgagcactt 300
 gggagaactg ctaacagttt tgctcaccct ggatgaaatt attgataatc atacacact 360
 gaaagaccac tggactatgt acaaaagggt actgaaatct gtccatcaca atccttcaaa 420

atttgaatt caggaagaaa cattaaagcc atttgaaaag ttcttgctga agctagaagg 480
 gcaattactg gatggaatga tattccaggc ctgtatagaa caacaatttg attctctcaa 540
 tggaggagta tctgtgtcaa aaaatagtag ttttgctgag gaatttgcac atagtattca 600
 gtcaatTTTT gcaaatgtag aagccaaact tggagaacct tctgaaattg accagagaga 660
 caagtatggt ggaatttgtg gactctttgt attgcacttt cagatttttc gaactattga 720
 taaaaagttt tataagtctt tattggacat ttgtaagaag gtaccagcca tcactctact 780
 gctaataatta tttgggttcc tgataatttc tgatccagaa atccacagct gccaaactgta 840
 gacagaaaag cttcagcctt aaatcacngg atcttctaca cagaagn 887

<210> 3406

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3406

gtaaatatgt tatggtggc tataaacgtg aaccagctgt ggagagggtg atagaatttg 60
 cagcaaagtt tgttacctca tttaccaat cagatatgga agatgatgag gaagaggaag 120
 atggtggcct tttaaattat ttgtttactt ttctcttaaa gtctcatgaa gcaaacagca 180
 atgcagtgag atttagagtg tgcctgctca taaacaagct tttgggaagt atgccagaaa 240
 atgctcagat tgatgatgat gtgtttgata aaattaataa agccatgctt attagattga 300
 aagataagat tccaaatgtg agaatacagg cagttctggc gctttcacga cttcaggatc 360
 ccaaggatga tgaatgccca gtggttaatg catatgctac tttgattgaa aatgattcaa 420
 atccagaagt tagacgggca gtgttatcat gtattgcacc atcagcaaag actttgccaa 480
 aaattgtagg gcgcaccaag gatgtgaaag aggctgtcag aaagctggct tatcaggttt 540
 tagctgaaaa ggttcatatg agagctatgt ccattgctca gagagtaatg ctcttcaac 600
 aaggtcttaa tgacagatca gacgctgtga aacaagctat gcanaagcat cttcttcaag 660
 gctggttacg gttctctgaa ggaaatatct tagagttgct ccatcggttg gatgtagaaa 720
 attcttctga agtggcagtc tctggtctca atgccttggt ttcaataact cctctcatga 780
 actggtnggg actctgtaaa accatgattg gcaggaaatt gattncagtg ggaaacattt 840

aactnctgaa attgctttgg

860

<210> 3407

<211> 895

<212> DNA

<213> Homo sapiens

<400> 3407

gttactcaca ttttgtgtgg aacatcacac atatcacata aaaaactata ttatgaacaa	60
ggacttgcta agaagagtct tggctttgat gaattcaaag cacacttttc tggccttgtg	120
tgcccttcgc tttatgaggc ggataattgg acttaaagat gaattttata atcgttacat	180
caccaaggga aatctttttg agccagttat aaatgcactt ctggataatg gaactcggta	240
taatctgttg aattcagctg ttattgagtt gtttgaattt ataagagtgg aagatatcaa	300
gtctcttact gcccatatag ttgaaaactt ttataaagca cttgaatcga ttgaatatgt	360
tcagacattc aaaggattga agactaaata tgagcaagaa aaagacagac aaaatcagaa	420
actgaacagt aacagatttc gcagagatgc aaaagccttg gaagaggatg aagaaatgtg	480
gtttaatgaa gatgaagaag aggaaggaaa agcagttgtg gcaccagtgg aaaaacctaa	540
gccagaagat gattttccag ataattatga aaagtttatg gagactaaaa aagcaaaaga	600
aagtgaagac aaggaaaacc ttcccaaaag gacatctcct ggtggcttca aatttacttt	660
ctcccactct gccagtgtg ctaatggaac aaacagtaaa tctgtagtgg ctcagatacc	720
accagcaact tctaattgat cctcttccga aaccaccaa cttgcctacg tcagtaacag	780
ccaccaaggg aagtttggtt ggcttaatgg gattatncag atgatgaana ggaagatgaa	840
gaagaagaat cgtccccag gaaaagaact tggcttggct cataaaatat ttntt	895

<210> 3408

<211> 842

<212> DNA

<213> Homo sapiens

<400> 3408

gatcaccatg acagatataa taacataata gtaacagaaa agtttgaaaa atgcaaatta	60
ccaaaatgtg agctcatggt tttggagaaa atggttccaa tagactcacc agatgcaggg	120
ttgccacaaa tcttcaattt gtaaaaaacg caatatctct gaaccacagt aaagttgaag	180
tgcaacaaaa ttaggtatgc ctgtatggaa acgcagagct cacacccttc tgatgaacag	240
acagaagtgt cagatccttt tctatgctag caaaggattt taagggtttg gaattctcta	300
aaagtgtaaa gctcttagga gggcgttact tggcaaagca gtgctttatc ccattctctt	360
gtttgcctgt tcaaacttcc caccattgt agaccactt gctgtgttat tgcaggttaa	420
gcccccaaga cctttttctc tcaccttttt tgttcacttc ccatccctt tccttctcag	480
gtcatcctcc atgcccttct gatgtccaca tgtctcttca ttttcttctc aggcctcctc	540
tttctctcac catctaagtt attgaaattc ttgaaatcct aagcaggcct ggactgaga	600
ggtaagcacc tgagagtgtc agtcttccct agataaatgg aactgtgtgc agatctggga	660
ctgctggaag ggtgtggggt agggatttaa ggatggcgca agtaggggtg ggctaaaaaa	720
gaccttggtc tctttatata ggagcatcga gattaaaggg tgtgangtag gggttttaag	780
gatggccaag gtcaagtggg gcttaaaaaa ggaccttggg ctttctttta ttatnggan	840
cc	842

<210> 3409

<211> 848

<212> DNA

<213> Homo sapiens

<400> 3409

aaactttatg aggcagctgt gaagaaagtt cccaatagtg aggagtatca ctctcacctc	60
ttcatggcct atgccagagt ggggtgaatac aagaaaatgc aacaggctgg catggctcta	120
tataagattg tccccaaaaa tccctactac ttttggctg tgatgagctt aattatgcaa	180
tctatatcgg cacaggatga aaacctctca aaaacaatgt ttctgcccct tgctgagaga	240
atggctgaaa aaatggtgaa agaggacaag atagaagctg aggctgaagt tgaactttat	300
tatatgacct tggaacgttt gggaaagtac caggaggcct tggatgtcat cagagggaaa	360

ttaggagaga agttgacaag tgagattcag agtcgggaaa ataaatgcat ggctatgtac 420
 aagaagctga gcaggtggcc agagtgcaat gccctttccc ggcgccctctt actaaaaaac 480
 tcagatgact ggcagttcta tctgacttat ttcgattctg tctttcgact gattgaagag 540
 gcctggagtc ctccctgctga aggtgaacac tctttagaag gagaagtaca ttattctgca 600
 gaaaaagctg tgaagtttat agaagatcgg ataacggaag aatctaaaag ttctcgccat 660
 ctccgaggac cacatctagc taaattggag ctgattaggc gtttacgaag tcaaggttgt 720
 aacgatgagt acaaactggg tgatcccaga agaattaatg gtccagtatt ttaaaaagtt 780
 tggcgataaa ccntggtggt ttacagaccc ttaaggtggt tgttgacctc ttacctgntt 840
 cacagngt 848

<210> 3410

<211> 902

<212> DNA

<213> Homo sapiens

<400> 3410

atgtaaatgg ctctagagtt agagtgactg tttgctcttc tgctttctgg aatgcagatg 60
 acagtatgga aagaaagaat aatgattcta tctaatagga aaggatttct tctttctttt 120
 ttaaagagtg ggtggatttt ctcccttttg ttttgctttt attttcatgc tactaacata 180
 tcttcagaag gaaatggcaa ctagtagatc agtaaaatta cgaaaacgat gcctgcaaaa 240
 tttgaaggaa tgcaattctg atttgccatt tatcaggga aactgaaagc atttttctta 300
 taactttttt tctttttctt tttttttgga ggggggaggc aggggtcttg tctgtccctc 360
 aggctggagc ttagctcagt gcagcctcca actcctgggc tcaagcaatc ctcccacttt 420
 agcctcctga gtagctggga ctacaggcgt gtgccagcgc gcctgggctaa ttttaaaatt 480
 tttttgtaga gacagagtct ccctctgttg cccaggctgg tctggaactc ctagcttcaa 540
 atgatcctct cacctcggcc tcccaaaatc ctgggattcc aggcgtcagc cactgctctc 600
 ggccctctta caccattttg tttgattgtc tagtccctgt ttctttttct ttctaactct 660
 tattcattta agcaaaaacca tacattatct ttccagtc tttcttgnat tcttactgnt 720
 tttttaaaat aactttttgc cttaatagct cattgtcact aataacttct gngttctccc 780

agcagtgtta tacagaaggg caatgaaaac attggacatg accatgagtg cttcctttcc 840
 ttactctang tttgtagtct ggtttaaata ggatagttcc tgcattctga aaacattggn 900
 ct 902

<210> 3411

<211> 760

<212> DNA

<213> Homo sapiens

<400> 3411

cttcgcgcac ctcattggaat cccttctgca gcacctggat cgcttttccg agcttctggc 60
 ggtctcaagc actacctacg tcagcacctg ggaccccgcc accgtgcgcc gggccttgca 120
 gtgggcgcgc tacctgcgcc acatccatcg gcgctttggt cggcatggcc ccattcgcac 180
 ggctctggag cggcggctgc acaaccagtg gaggcaagag ggcggtttg ggcggggctc 240
 agttccggga ttagcgaact tccaggccct cggtcactgt gacgtcctgc tctctctgcg 300
 cctgctggag aaccgggccc tcggggatgc agctcgttac cacctgggtgc agcaactctt 360
 tcccggcccc ggcttccggg acgccgatga ggagacactc caagagagcc tggcccgcc 420
 tgcccgccgg cggctctcgg tgcacatgct gcgcttcaat ggctatagag agaaccctaa 480
 tctccaggag gactctctga tgaagaccca ggcgagctg ctgctggagc gtctgcagga 540
 ggtggggaag gccgaagcgg agcgtcccg caggtttctc agcagcctgt gggagcgctt 600
 gcctcagaac aacttcctga aggtgatagc ggtgggcgct tgttcagcc cgcctttgtc 660
 ttgtcgcccc caagaagaag tttggaaccc cggnattnca caaatcacct ggaaaagggg 720
 aagcccaaag tgcttagttc ccactgggct ttnttggggg 760

<210> 3412

<211> 748

<212> DNA

<213> Homo sapiens

<400> 3412

```

ggcgcgcggc gagctgaggg tggcggcggt cgacatgttc caggtcccgg atagcgaggg 60
cggccgcgcc ggctccaggg ccatgaagcc cccaggagga gaatcgagca atcttttttg 120
aagtccagaa gaagccactc ctccagcag gcctaataagg atggcatcta atattttttg 180
accaacagaa gaacctcaga acatacccaa gaggacaaat cccccagggg gtaaaggaag 240
tggtatcttt gacgaatcaa cccccgtgca gactcgacag cacctgaacc cacctggagg 300
gaagaccagc gacatttttg ggtctccggt cactgccact tcacgcttgg cacacccaaa 360
caaacccaag gatcatgttt tcttatgtga aggagaagaa ccaaaatcgg atcttaaagc 420
tgcaaggagc atcccggctg gagcagagcc aggtgagaaa ggcagcgcca gaaaagcagg 480
ccccgccaag gagcaggagc ccatgcccac agtcgacagc catgagcccc ggctggggcc 540
gcggcctcgc tctcacaaca aggtcctgaa cccaccggga ggcaaatcca gcatctcctt 600
ctactaagag aagccactgc tccaccggga gccagaccag aaactcaaga gatagggtag 660
ccatgttttc atttcctttt gnccaaatga accgggggtg gaaganggtt aagtcttatg 720
tgagcctggc tgnttaaccg tcttctgg 748

```

<210> 3413

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3413

```

cgcatctgct gctgccgccg cagttgcgaa tgcagcatcg gcgcttagct gcctccgcgg 60
tgcagctaag gttcgtgtcg ctacccttg gcccttcgct cttgttgcct taaccccgcc 120
ggtggagccc gctcttctgg cctgttgagc ccgctccctc actgccacac agcaagtcc 180
gagaccatgg attcgggcag cagcagcagc gactcggcgc ccgattgctg ggaccaggtg 240
gacatggaat ccccggggtc ggccccgagc ggggatggag tctcctctgc ggtggccgag 300
gcccagcgcg agcccctcag ctcggtttc agccgtaagc tcaacgtcaa cgccaagccc 360
ttcgtgccta acgtacacgc cgcggagttc gtgccgtcct tcctgcgggg cccgactcag 420
ccgccaccc tccgggccgg ctccggcagc aacgatgaaa cctgcaccgg cgcgggatac 480

```

ccttaaggta aaaggatggg acggggggca cctgtggaac cttcccgaga ggaaccgtta 540
 gtgtcgcttg aaggttccaa ttcagccgtt accatggaac tttcagaacc tgtttagtaa 600
 aatggagagg tggaaatggc cctagaagaa tcatgggagc acagtaaaga agtaagttaa 660
 gcccaacctg ggggtgggtc ctgaggagat taagggcccc anaaaaaagt ggnccggaaa 720
 tgatggagga aaaagaggaa attagaaaat ccaaata 756

<210> 3414

<211> 779

<212> DNA

<213> Homo sapiens

<400> 3414

atcaggggat ccccaaagaa agcaagggga ccaaggccgg gactgctggg gtgaaggctc 60
 gggaggctga gtaaggggac ggaagggcac aggccatgga aaggaatgac atcatcaact 120
 tcaaggcttt ggagaaagag ctgcaggctg cactcactgc tgatgagaag taaaacggg 180
 agaatgctgc caagttacgg gcagtggaa acaggggtggc ttcctatgag gagttcaggg 240
 gtattgtcct tgcatacat ctgaagccac tggagcggaa ggataaatg ggaggaaaga 300
 gaactgtgcc ctggaactgt cacactattc aggggaaggac cttccaggat gtggccactg 360
 aaatctcccc ggagaaagcc cccctccagc ccgagacgtc tgctgacttc tatcgtgatt 420
 ggcgacgaca cttgccaagt gggccagagc gctaccaggc tctactgcag cttgggggtc 480
 caaggctcgg ctgcctcttc cagacagatg tgggatttgg acttcttggg gagctgctgg 540
 tggcactggc tgatcacgtg gggccggctg accgggcagc ggtgctgggg atcctatgca 600
 gcctggcgag cactgggcgc ttaccctgaa cctaactgc tgagcccggg cagagagaga 660
 gagctgcaag ggcttggttc aaaactgcaa gccatgggca accccagatc cgtgaangaa 720
 gggctcactg ggaagaacag ggtctggaga acaatctggt ggcttcaaga aganganag 779

<210> 3415

<211> 863

<212> DNA

<213> Homo sapiens

<400> 3415

```

atgttctgtc gtctctcgca gtttacgcgg aagattcaga gcccagagtct gatggcgagg 60
ctggaatcga ggcggtgggc agcgcggtg aggagaaagg cggattggta tctgatgcct 120
atggggagga tgacttttct cgtctagggg gtgatgaaga tggttatgaa gaagaagaag 180
atgagaacag tagacagtcg gaagatgacg attcagagac tgaaaaacct gaggctgatg 240
acccaaagga taatacagaa gcagaaaagc gagaccccca ggaactcgtg gcctcctttt 300
ctgaaagagc tcggaacatg tcgcctgatg aaatcaagat cccgccagaa ccccttgga 360
gatgttcaaa tcacttgcaa gacaagatcc agaagcttta tgaacgaaag ataaaggagg 420
gaatggatat gaactacatt atccaaagga agaaagaatt tcggaaccct agcatctacg 480
agaagctgat ccagttctgt gccattgacg agcttggcac caactacca aaggatatgt 540
ttgatcccca tggctggtct gaggactcct actatgaggc attagccaag gccagaaaa 600
ttgagatgga caaattggaa aaggccaaaa aggagcgaac aaaattgagt ttgtgacggg 660
caccacaaaaa ggcaccacga ccaacgccac gttcaccacc actccactgg cagcacagct 720
tgttgcagat gctcagaaga gaaagagcaa gtgggattcg gttttccagt gacaacgata 780
gcccancac catcttacca ncacagccac cttgccact gttgtcacgg tcaccaccag 840
cgccagcggg tccaaaaccn cgg 863

```

<210> 3416

<211> 884

<212> DNA

<213> Homo sapiens

<400> 3416

```

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa agttcctggg agaagccggg ctgcctcacg 60
aggcactagg aactacattt cccggaaagt actaaattta agaatgtttg gacaactcat 120
tccaggtcac ctatagccta tgagagagga agaatatatt ttgacaatta tcggcgctgt 180
gtcagcagtg ttgcatctga gccaaagaaa ctttatgaaa tgccaaaatg ttccaaatca 240

```

gaaaaaatag aggatgcttt attatgggaa tgcccagtgg gagatatact tcccaattca 300
 tcagattata agtcctcact catagcactg actgctcata attggctact tcgtatatca 360
 gcaactacgg gaaaaatcct tgagaaaata tatcttgac cttattgcaa attcagatac 420
 ttgagctggg acactcctca agaagtcatt gcagttaagt cagctcagaa cagaggctca 480
 gcagtggccc ggcaggcagg cattcaacaa catgttttgc tgtaccttgc agtgttccga 540
 gttctacctt tttcacttgt agggattcta gagatcaaca aaaagatttt tgggaacgtt 600
 acagatgcta ccttgctcat ggaatactga ttgtgatga cagctcagga ctggtcagac 660
 tctatagctt ccaaaccatc gctgaacaga catgccacca ctgctctttg aggggcatcc 720
 ctggaaaatg cttttcaaat tggaggccat ncttggcact acatcgtcac cctaatagga 780
 agaaaccgaa aggagttttc catatttgng cctaaaagac aattcctggc aaaaaatggg 840
 atccnggaaa tgggatgggg tctctaaaac tgactggact ntcc 884

<210> 3417

<211> 906

<212> DNA

<213> Homo sapiens

<400> 3417

tatgcctgtt tttatgttta cctataatth tcatatagcc gtataaggat tgatttacca 60
 ttttttggcc aacatgacaa ttctggctat gaaaattatg tttaaactgt gtatgatcta 120
 ttttatgtgc tctatgttcc catttgtttg ttgtgtctgg acagtgggtc tggaatgaat 180
 tctatctagt aaattagtaa atgtgctgtt ttgtataaag catgataatt actttttaac 240
 agaagttcat ttttaaagat tactcccttt tctttctctc tttttttttg agacaatttc 300
 tctcttgttg cctaggcagt gcagtggcgc gatctcagct cctgcaact tctgcctccc 360
 aggttcaagc gattctcctg ccttagcctc ctgagtagct gggtcagcca ccatggctga 420
 ctcatTTTTT gtatttttag tagagaagggt gttttaccgt gttggccggg ctggtcttga 480
 actcctgacc ttgggtgatc cacctgcctc agcctcccaa agtgctggga ttacaggcgt 540
 gagctatccc gcccggtccc cttttcttta ttatcgaaga tattgtttta aagaaagaaa 600
 aagtaggtcc caataatata tgtgctattc aaaaaatgtg atcatttagg acattatcac 660

aagttgctat ggaaataact gaagacttcc tcaggagaag gaaagaaaat gaggaacata 720
 atgatagagt cggggaactc ccactagctc acctganggg ggctcgatgc agctgaaata 780
 ctgaatactg aaatactaga aaccaacaaa actggtttct agaattctnc anggatttgg 840
 gcttgggaaa cttggtaaga atagttttta ttttgaaca ttcaacttgg gtcttcaaag 900
 taatct 906

<210> 3418

<211> 795

<212> DNA

<213> Homo sapiens

<400> 3418

gcgcccagcc tgccagccgc gctgctgctg ctctctctgc tgtgggaccg ctgaccgcgc 60
 ggctgctccg ctctccccgc tccaagcgcc gatctgggca cccgccacca gcatggacgc 120
 tcgccgcgtg ccgcagaaag atctcagagt aaagaagaac tttaaagaaat tcagatatgt 180
 gaagttgatt tccatggaaa cctcgtcac cctctgatgac agttgtgaca gctttgcttc 240
 tgataatfff gcaaacacga ggctgcagtc agttcgggaa ggctgtagga cccgcagcca 300
 gtgcaggcac tctggacctc tcagggtggc gatgaagttt ccagcgcgga gtaccagggg 360
 agcaaccaac aaaaaagcag agtcccgcca gccctcagag aattctgtga ctgattccaa 420
 ctccgattca gaagatgaaa gtggaatgaa ttttttggag aaaagggtt taaatataaa 480
 gcaaaacaaa gcaatgcttg caaaactcat gtctgaatta gaaagcttcc ctggctcggt 540
 ccgtggaaga catccccctc caggctccga ctcaaatca aggagaccgc gaaggcgtac 600
 attcccgggt gttgcttcca ggagaaaccc tgaacggaga gctcgtcctc ttaccaggtc 660
 aaggtcccgg atcctcgggt cccttgacgc tctacccatg gaggangagg aggaagagga 720
 taagtncatg ttggtgagaa agangaagac cgtggatggc tacatgaatg aagatgacct 780
 ggccagaagc cgtcg 795

<210> 3419

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3419

```

ggagtttctc caccagcaac atggccgccg cctgagagga gagccgggcc gccgccgtct 60
ctgcagcccc cggttaactg ggccgttgcc gccgtccgcg ctccggcccc gcggagagat 120
cgagctgaag gactgcgcgg ctggctctcc tctagtatgg ccaatgaaga ggatgaccca 180
gttgtacagg agatcaatgt gtacttggcc aagagtctgg cggaaaagct gtatctatct 240
cagtaccctg tgcgtccagc ctgatgacc tacgatgaca ttccgcacct ctgagccaag 300
atcaagccca agcagcagaa ggtagagctt gagatggcca tcgacaccct gaaccccaac 360
tattgccgca gcaaagggga gcagattgcg ctgaacgtgg acggggcctg cgccgacgag 420
accagcacgt attcctcgaa gctgatggac aagcagacct tctgctcttc ccagaccacc 480
agtaacacat cccgttatgc cgctgcactc tacaggcaag gtgagctcca cctgacacct 540
ttacatggca tcctgcagct gcggcccagc ttctcctacc tggataaggc tgacgccgag 600
caccgggaga gggaggcggc caatgaggca ggggactctt cacaggatga ggcngaagac 660
gatgttaagc agatcacggt gcggttctcc ggcccggagt cagagcaggc ccgncagcgc 720
cgtgtgcant cctatgagtt cctgcaaaaa gaagccccc aaagaacccc tgggtccacc 780
ttgcattact atgggcctga ngggaca 807

```

<210> 3420

<211> 817

<212> DNA

<213> Homo sapiens

<400> 3420

```

tttgacaact cacagtcact ggatgctgct gaagaagagc cctctgagag aggaacagag 60
gaggaccctg tattctctgt tgagaattca gggagggact cagatgccct tagacttgaa 120
agtacggtgg ttgaggagag caatggttct gatgagatgg agaattcaga tgaaaccaa 180
atgtcagaag aaatactggc ttggtggat gaatttcaac aggcattggc tttggaaggc 240

```

tttgggggtg cactagagat gaaagggcgg cgtctagact tacaaggaat acgggtgctg 300
 aagaaaggtc cccaggatgg agtggccaga agctcttgct atggagactg cagaagtga 360
 gatgatgaag caacagaatg gattacattc caggtcaaac gtgtaaagaa acccaaagga 420
 gatcataaga aaactcctgg gaaaaaagta gaaacaggtc agatagaaaa tggacatcgt 480
 taccaagcaa acctagagat cacttgcccc aaggtggcat ctctgggcc acaaggaaaa 540
 aaacgtgact accagcgtct gggatggccc agcccggacg aatgcctcaa actccgctgg 600
 gtagagctga ctgccatcgt gagtacctgg cttgcagttt cttcaaaaaa cattgacatc 660
 acagaacaca tagattttgc cccctatac agcagccagc aatggacctc tttgcaatgg 720
 caatctcccc acgagtatcc taccctggcc cttgcatggg gttccacccg accagctgac 780
 tncacagggg agagcagtta cagaggnttn caaatct 817

<210> 3421

<211> 802

<212> DNA

<213> Homo sapiens

<400> 3421

cagcgcgggc ccggagcagg gggaaggga gtgcggctcg gtcggcgcgg gtggaggggg 60
 cgtgaggccg ccctacggtg gccgtcgagg gacggcgcta cggtctccac gctaggccaa 120
 acgcctccgg cggccgcgcc cgagagcccc ttcacctgca gggcgacccc agccggcgac 180
 gcgtgaacca cgccctcagc cgccttgcca gcgccccag ccgcgcgccc cagcaccatg 240
 cggccgccct gcgcacggag ccccgaggga caggggcacc cgcaggcccc gccctagca 300
 ccgccggccg gccccgaggt ccgggacgcc ggcgccgccg cggagagggc accgggcccga 360
 cgcctcccc cagggtcagc tgcgggctcc caggcctagg cgcccatgac ccctacgcca 420
 accgccgcct ggacaccgcc gccgccactg cgacctagcg ccgccgccg ggcccaatgc 480
 cggatcatgcc cattccgagg cgggtgcgt ccttcacgg gccgcacacc acctgcctgc 540
 atgcggctgc gggcccgtgc gcgcctncca cctggcccg accaagtaca acaacttcga 600
 cgtgtacatc aagacgccgc tggctgtacg gttcatccc gtttctact ctactttagc 660
 ttgcaagcct gttcacttgc ggcgttntg gggttgccgc ttggccgcc cttcttcttg 720

ncttacagta cccttgggcg gtttcgccgt tccttggctt tgncttttc caagcgcaaa 780
gcttggttcgg gtggccccct tn 802

<210> 3422

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3422

agcgggcgtg cggagcgggc gacagtggcg tgggatctgc ctctctgcga gcagctggga 60
gcggcggcgg cggcgccatg agcgggggca ccccttacat cggcagcaag atcagcctca 120
tctccaaggc ggagatccgc tacgagggca tcctctacac catcgacacc gaaaactcca 180
ccgtagccct tgccaaagtt cgatcctttg gtacagaaga cagaccgaca gatcgtccaa 240
taccacctcg agatgaagtc ttggaataca ttatattccg tgggagtgc attaaagacc 300
ttactgtttg tgagccacca aaaccacagt gttcctttgcc tcaagaccca gctattgttc 360
agtcctcact aggctcatcg acttcttcat tccagtccat gggttcttat ggacctttcg 420
gcaggatgcc cacatacagt cagttcagtc cgagttcctt agttgggcag cagtttggtg 480
ctgttggtgt tgctggaagc tctttgacat cctttggaac agaaacatca aacagtggta 540
ccttacccca aagtagtgcg gttggttctg cctttacaca ggatacaaga tctctaaaaa 600
cacagttatc tcaaggtcgc tcaagccctc agttagaccc tttgagaaaa agcccaacca 660
tggaacaagc agtgcanacc ggcttnagcc cacttacctg gtccagcaac tgttgggaga 720
angagt 726

<210> 3423

<211> 779

<212> DNA

<213> Homo sapiens

<400> 3423

ggcctttttt tttttttttt tggtttttat gtgtatttat taaaaaaagc aattaccgga 60
 ttaggctgac agaattgatta ggctgaccat taaaaggact ggcaacttta tcctcagagt 120
 ttagaggtaa gtttgaaga attcaggatg tttgtctaag attgcttgat actagggcaa 180
 caagactgag agcagagggc actaaaaaga ctgtctaggg gttagacatc aattgtgttt 240
 aagtctgaga tctgccccctt aggtaccata tgaccctgca caagtcacg acccctccac 300
 actccagtgt gtcactgtta atgaggatgg ggcactccct tccacactgc agcactgcgg 360
 gaaccgagac aatgccatcg cagaggacct gcaggggaca ggctacttca ctcactctc 420
 tccttccac tcttcagaga acaaggactt gtgctactgt attctcacag cactcactgg 480
 cctgggaacc agctgtggga gccctatggg cctggctatc aactctcaac tgcttgtgtg 540
 cagctgtagg aaccctctga ggtgtggcag gtagaggatg ggggtgggtgc ccaggcacac 600
 tgctgacttt ctggagccct gcccaccccc aaccctctcc ttattactaa tgacatggga 660
 acccacctgc tccactgtgc agncccaagt ctgatccaag tcangctcct gaatgtgagg 720
 aaccgaacct gggggccaca gggaagtggg atcacttgaa aagctntaac cattggccg 779

<210> 3424

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3424

gatcgcccc agcggagcta atcagattac ctggctagtgt tttgcttgtt ctggagtgat 60
 cttctgactg gaaaagaact atgtcatgga tcaaggaagg agagctgtca ctttgggagc 120
 ggttctgtgc caacatcata aaggcaggcc caatgccgaa acacattgca ttcataatgg 180
 acgggaaccg tcgctatgcc aagaagtgcc aggtggagcg gcaggaaggc cactcacagg 240
 gcttcaacaa gctagctgag actctgcggg ggtgtttgaa cctgggcatc ctagagggtga 300
 cagtctacgc attcagcatt gagaacttca aacgctccaa gagtgaggta gacgggctta 360
 tggatctggc ccggcagaag ttcagccgct tgatggaaga aaaggagaaa ctgcagaagc 420
 atgggggtgtg tatccgggtc ctgggcgatc tgcacttgtt gcccttggat ctccaggagc 480
 tgattgcaca agctgtacag gccacgaaga actacaacaa gtgtttcctg tatgtctgtt 540

ttgcatacac atccccgtcat gagatcagca atgctgtgag agagatggcc tgggggggtgg 600
 agcaaggcct gttggatccc agtgatatct ctgagtctct gcttgataag tgcctctata 660
 ccaaccgctc ttctcatcct gacatcttgg atccggactt tttggaaaaa gtgcggcttg 720
 agtgacttct tactatggca agacctctca ctccttgcct ggtggttcca acccgttctg 780
 nggncagaag tttncatttt gggaaccttt ttc 813

<210> 3425

<211> 906

<212> DNA

<213> Homo sapiens

<400> 3425

ttttaatggg gctcatatat actgtatfff ttgttgttta gttttactta ttgagagtgt 60
 cacaacatga atcacataat catgatffff tttttttact tttactcccc aaattattca 120
 tgtttcttag atcgtagtca ttgagaagtc ccaataactc taaacttttg agttataacg 180
 tagtaaactt ctctttcatc tttgtgttag ctctgtagtc ttaacctgga ttttaatttt 240
 tttgtttcca aagtcacaat tgaattattc ttagatacct taagccactg aattcagttc 300
 tgtttgactg aaagcaaac aacgtgacag tttattttca aacactaact tcttgatatt 360
 ttgttatggg atatctffff attaaatatt tattttgact aagctttcat aaaatatttg 420
 aagctatfff aatcatcaag tatggaaaac aaattactat tgcattttcc tatatatgca 480
 tatattatgg attaaccaga attgtatcat ttttggccta atgtctggat ataaaagata 540
 attagcctac tatagtatta ataaatffff cagttggttt gggcaaattt aaacctgaaa 600
 aatagggttaa aaagtagtta caaattaaac ttactaattt atacctgatt ttttttcttg 660
 aattaaagta cattttaaat gagctttata ataccttaaa aaggttggtc taatttaaaa 720
 tatgaaagct ctggctatca tcctggggat agtaatttct aattatatag tatttcaaaa 780
 ctatatattt tttagttcct ttggagataa cctaatttct aattatatat gtttcaaaaa 840
 ccatatcctg gatffffttt aaagaatggg tttataaatn ggncataagg atncaagggc 900
 tgcatt 906

<210> 3426

<211> 884

<212> DNA

<213> Homo sapiens

<400> 3426

```
gcagaggcct gcggaagcc aagatggcgc ataggggttc tccaggctgc agttggcgcc 60
ttatcagtat ctaagcggag tgttttggaa ggagttaagg ggctgtggca aacgccctct 120
ccgccgtcat ggcccggcat cggaatgttc gaggctataa ctacgatgaa gattttgaag 180
atgatgatct ctacggccag tctgtagagg atgattattg tatttcgccg tcaacagctg 240
cccagtttat ttattcacgg cgtgacaaac cttccgttga gcctgtggaa gaatatgatt 300
atgaagatct gaaagaatct tccaattctg tttcaaacca tcagctcagt ggatttgatc 360
aagctcgtct ttattcatgc cttgatcaca tgagagaggt acttgagat gctgtgccag 420
atgaaatatt aattgaagca gttctgaaga acaagtttga tgtgcagaag gctttgtcag 480
gggttctgga acaagataga gtgcagagtt tgaaggacaa gaatgaggca acagtatcta 540
caggaaagat agcaaaagga aaaccagtag attcccagac atcgcgaaagt gaatctgaaa 600
ttgtgccaaa agttgctaaa atgactgtat ctggaaagaa gcaaactatg ggatttgaag 660
tgccctggagt gtcttctgaa gaaaatggtc atagtttcca cacacctcaa aaaggaccgc 720
cattgaagat gccattgctt cttccgatgt tcttgagact gcttctaaat ctgctaatnc 780
acccacacag attcaagcat cagaagaagc agagttcaac ccagcaccgg tggaaaaagt 840
ctgcaagctg aggcacaaat agatgtnaag cggactggan aacc 884
```

<210> 3427

<211> 697

<212> DNA

<213> Homo sapiens

<400> 3427

```
accctcgggc tcgagacagc ggcgacgttt aaagctgagc gaccagtgac cactggagac 60
```

ggtcagcttc tccactcagg ctccctccagc ccgagccaga agacccccctc cccagaaatt 120
 ctgggggccc atggaaggga gccgagtcag atcgcgaggt acccagagcc gacagaccgg 180
 agcgacaggg agttgccaga agccccgccc ctaggagtga tcggaagcc tcacccatcc 240
 ggggtgaggaa cccggaggga ccgcctccgg gcggagcccc ccgaccatgg ctacgcccct 300
 ggtggcgggt cccgcagctc tacgcttcgc cgccgcggct agctggcagg ttgtgcgcgg 360
 acgctgcgtg gaacattttc cgcgagtact ggagtttctg cgatctctgc gcgctattgc 420
 ccctggcttg gttcgctacc ggcaccacga acgcctttgt atgggcctaa aggccaaggt 480
 ggtggagctg atcctgcagg gccggccttg ggcccaagtc ctgaaagccc tgaatcacca 540
 ctttccagaa tctggacctg tagtgcggga tccaaggct acaaagcagg atctgaggaa 600
 gattttggag gcacaggaaa ctttttacca gcaggatgaag cagctgtcan aagctnctgt 660
 ggatttggcc tcnaacttca ggtgaaactg ggttgaa 697

<210> 3428

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3428

agggactttt gctcccacaa gtcctgcctc ggaggcgggg gagctggacc agcagccgcc 60
 tggagcgtcc gagtcaccgt cgccgggggt cccgcgctcc ccagaacggg gggacgcggg 120
 gctcggcagc cgccagcggg acatggcgcc ctggacgctg tggcgctgct gccagcgcgt 180
 cgtgggcttg gtgccggtgc ttttcatcac ctctgtggtc gtctggtcct actacgcgta 240
 cgtgggtggag ctctgcgtgt accacgttga tgagcgaaca atatgcaatg gaattgcccc 300
 agaaaaagat gtagatggat ttcattattat caatattgga agattgtgcc ttgatcagca 360
 ttctctcata cctgccactg ccagtgtgtt ttgggaaata ataaaaagaa cagggaattca 420
 aacatttggg aaaaatgtgg ttgtggctgg aagatccaag aacgtaggga tgcctattgc 480
 catgctttta cacactgatg gagagcatga acggccagga ggtgatgcaa ctgtgacaat 540
 agctcacaga tacaccccca aagagcaact gaagattcat acgcagctgg cagatattat 600
 catagttgct gcaggatatt caaagttgat tacgtctgat atggttaaag aaggtgctgc 660

tgtaattgat gtgggtatca actatgtcca cgatccaatg acaggaaaga caaaattagt 720
 tggagaatgt ggacttnnaa cttgttaaaa agaaagctgg ctttattact tccagttcca 780
 ggaaggtgtt ggacccatt gacaatgggc aatgcttttt gaaaaacacc cctttttggc 840
 ancttaaaaa aatcatttac tntgatccca ttgaaagggt taaagccaac ttgaantt 898

<210> 3429

<211> 769

<212> DNA

<213> Homo sapiens

<400> 3429

taaactcggg ccgcggcggg gcgagcgagg cgggctccgg agggagctga cgcctgatga 60
 tggcgcagtc caacatgttt accgtggctg atgtgttgag tcaagatgaa ctgcgcaaaa 120
 agctatacca gacgtttaag gatcggggta tactggatac actcaagaca caacttcgaa 180
 accagcta atcatgagttg atgcaccctg tattgagtgg agaactgcag cctcgggtcca 240
 tttcagtaga agggagctcc ctcttaatat gcgcctctaa ctcttttagtg gcagatcact 300
 taaaaagatg tggctatgaa tattcacttt ctgttttctt tccagaaagt ggtttggcaa 360
 aaaaaaggt atttactatg caggatctat tacaactcat taaaatcaac cctacttcca 420
 gtctctacaa atcactgggt tcaggatctg ataaagaaaa tcaaaaaggt tttcttatgc 480
 attttttaaa agaattggca gaatatcatc aagctaaaga gagttgtaat atggaaactc 540
 agacaagttc gacatttaac agagattctc tggctgagaa gcttcagctt attgatgac 600
 agtttgcaga tgcttaccct nagggtatca agttcgaatc tttagaaata aagctaaatg 660
 agtataagag agaaatagaa gagcaacttn gggcagaaat gtgtcaaaaag ttgaagtttt 720
 tttaaagatc cgngatncaa aaattaaaaat ggaacaaaaa aaaaagttt 769

<210> 3430

<211> 911

<212> DNA

<213> Homo sapiens

<400> 3430

```

ctgaagctgc tgggcaaagg gaacattatc atcagcacc ctagaagtg ggacatactt 60
tcccggcgat ggaagcagcg cangaacgtg cagaacatca acctcttcgt ggtggatgag 120
gtccacctta tcgggggcga gaatgggcct gtcttagaag tgatctgctc ccgaatgcgc 180
tacatctcct cccagattga gcggcccatt cgcattgtgg cactcagctc ttcgctctcc 240
aatgccaaagg atgtggccca ctggctgggc tgcagtgcc cctccacctt caacttccat 300
cccaatgtgc gtcccgtccc cttggagctg cacatccagg gcttcaacat cagccataca 360
caaaccgcc tgctctccat ggccaagcct gtgtaccatg ctatcaccaa gcactcgccc 420
aagaagcctg tcattgtctt tgtgccgtct cgcaagcaga cccgcctcac tgccattgac 480
atcctcacca cctgtgcagc agacatncaa cggcagaggt tcttgactg caccgagaag 540
gatctgattc cgtacctgga gaagctaagt gacagcacgc tcaaggaaac gctgctaaat 600
ggggtgggct acctgcatga ggggctcagc cccatggagc gacgcctggt ggagcaagct 660
cttcagctca ngggctatcc aggtgggtgt ggcttctcgg agtctctgct ggggcatgaa 720
cgtggctgcc cacctggtaa tcatcatggg ataccagta ctacaatggc aagatccacg 780
cctatgtgga taccatcta tgacgtgctt caaatggtgg gccacgcaa ccgncctttg 840
caggacgatg aaggggccct tggntcatta atgtgtcang gcttccaaga aggattcttt 900
aaaaagttct t 911

```

<210> 3431

<211> 889

<212> DNA

<213> Homo sapiens

<400> 3431

```

tgcaagggtg tacaactatg agcctttgac acagctcaag aatgtcagag caaattacta 60
tgaaaaatac attgctctaa gagggacagt ggctcgtgct agtaatataa agcctctttg 120
caccaagatg gcttttcttt gtgctgcatg tggagaaatt cagagctttc ctcttcaga 180
tgaaaaatac agtcttccca caaagtgtcc tgtgcctgtg tgtcgaggca ggtcatttac 240

```

tgctctccgc agctctcctc tcacagttac gatggactgg cagtcaatca aaatccagga 300
 attgatgtct gatgatcaga gagaagcagg tcggattcca cgaacaatag aatgtgagct 360
 tgttcatgat cttgtggata gctgtgtccc gggagacaca gtgactatta ctggaattgt 420
 caaagtctca aatgcggaag aaggttctcg aaataagaat gacaagtgtg tgttcctttt 480
 gtatattgaa gcaaattcta ttagtaatag caaaggacag aaaacaaaga gttctgagga 540
 tgggtgtaag catggaatgt tgatggagtt ctacttaaa gacctttatg ccatccaaga 600
 gattcaagct gaagaaaacc tgtttaaact cattgtcaac tcgctttgcc ctgcattttt 660
 ggtcacgaac ttgttaaagc aggtttggca ttagcactct ttggaggaag ccagaaatac 720
 gcagatgacn aaaacagaat tncaattcgg ggagaccccc acatccttgn tgggtggagat 780
 ccagcctagg aaaaagtcaa atgctccagg cacgtgcaat gttgcccacc tggcgtgttt 840
 gttggggaac acacgacccc ttggctgcgn actttttaaa anaagtcn 889

<210> 3432

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3432

ttgggcgctt cgctgatggt gtcggtgagc gcgtttccc cctgagcgca actagcggcg 60
 ggctcgtgggc acctccaggc tcagacgtgc agcttctgga atacgaggcg tcagctgctg 120
 gcctcatccg atccttctct gagcgtttcc cagaggatgg acccgagttg gaggagatcc 180
 tcacacagct ggccacagcc gatgcccgat tctggaaggg ccccagtgag gccccatctg 240
 gccaaagcttg aggaagatgt gtggccttgc cccaattcc atcagaccaa ggctgcaagt 300
 ggccctccat tcgtcaatga ggccaattcg aagtggttgg atgcgcacta cgacceaatg 360
 gccaatatcc acaccttttc tgcctgccta gcgctggcag atttacctgg ggatggggaa 420
 tacaagctgg tggtagggga ctttggccct ggtgggcagc agccccgcct gaaggtgctc 480
 aaaggaccac tggatgatgac cgaaagcccc ctacctgctc tgccagctgc tgctgccacc 540
 ttctcatgg agcaacatga gcccgggacc ccagctctgg cacttgcttc aggcccttgt 600
 gtctatgtgt ataagaatct cagaccctac ttcaagtcca gcctgcccc attgacctna 660

aatcctctgg aacaagacct ttggaaccag gccaaagagg accgaatcga ccccttaacc 720
 ctgaaggaga tgctggaaaa cattccggga gacggcagan gagcctttgt ccattcagtc 780
 acttangttt ctgcaacttg gagcttaant gaaatgga 818

<210> 3433

<211> 808

<212> DNA

<213> Homo sapiens

<400> 3433

gcacattcta cctgaagcaa tggtttgta cttagaaaat tatgaacctg aaaagttttc 60
 tgagattttt ctaggagaat ttgatactcc agaagcaatc tggagcagtg aagtgaggcg 120
 cctgatgata gagaagattg ctgcccattc cgcggatttc acacctcgtc ttcagagtaa 180
 cacaagagca ctttatcagt attgccccat tcctataatc aactatccac aactcgaaaa 240
 tgaactatth tgtaatatth attacctcaa acaactgtgt gatacactcc ggthttccaga 300
 ttggccaatt aaagaccggt ttaagcttct aaaagatacc cttgatgcct ggaagaaaga 360
 agtagaaaag aagccaccta tgatgtcaat agatgatgct tatgaagtgc ttaatctgcc 420
 tcaaggacag ggaccgcatg atgagagcaa gattaggaaa gcttacttca gacttgcaca 480
 aaagtaccac cctgataaga atccagaagg gagggacatg tttgaaaaag taaataaagc 540
 atatgaatth ttatgtacca aatcagcaaa aatagtggat gggccagatc cagagaatat 600
 aattttaatc taaaaacaca gagcatctc ttcaaccgt cataaagaag atttacagcc 660
 ttataaatat gcaggatacc ccatgcttat tcggactata acaatggaaa cttcagatga 720
 cctncttttc tcaaaagaat caccattggt gcctgcggct acagagctag cttncatac 780
 tgncaactgt tcaaccctca atgctgaa 808

<210> 3434

<211> 832

<212> DNA

<213> Homo sapiens

<400> 3434

```

gtcaagagga tcatccatgc atcatgtgga ctggaggctg caggagaatt ccagttttgg 60
tattccatgc cgacgctatt cttacaaagg acaacaatat tagagtaatt ggagaacggt 120
atcatttgtc ttataagatt gtacgaacgg acagtcgcct agtacgcagc attctgacag 180
cccatggatt tcatgaagtt cacccaagca gcactgacta taacctaatg tggacaggat 240
cccacctgaa gccctttctta ctgcgcaccc tctctgaagc aaaaaagtt aatcactttc 300
ccaggtctta tgaacttacc cggaaggacc gactgtacaa aaacattatt cgaatgcagc 360
atacacatgg attcaaggct tttcacatcc tccccagac cttcctcctg ccagctgagt 420
acgcggaatt ttgtaattca tattcgaagg accggggacc ttggatagta aaaccagtgg 480
catcttcaag ggggcggggc gtctacctga tcaacaatcc aaaccagatc tccctggaag 540
agaacatttt ggtctcccggt tacattaaca accccctgct catagatgat ttcaagtttg 600
acgtgcgcct ctatgtgctc gtgacttctt atgatcctct tgnatctat ctctatgaag 660
aaggattggc tagaaaatgc aattggaaga tgggaaatac catggataaa agaagcttcc 720
tatttatgtc aggtgctttg cagatttatt ggactctgac actattattt tanaatggcn 780
tttaatgatt tagaagactt agttttttta catgnatccc atgcttggaa tc 832

```

<210> 3435

<211> 848

<212> DNA

<213> Homo sapiens

<400> 3435

```

gcagaggtgc ggccggggag gcgcgcggag gctggagctg gaggcgcggc gccggtgagc 60
tgagaaccat gtgtgctcag tattgcatct ctttgctga tgttgaaaaa gtcatatca 120
acattcgaga ttctatccac ctacaccag tgctaacaag ctccattttg aatcaactaa 180
cagggcgcaa tcttttcttc aaatgtgaac tcttcagaa aacaggatct tttaagattc 240
gtggtgctct caatgccgtc agaagcttgg ttctgatgc tttagaaagg aagccgaaag 300
ctgttgttac tcacagcagt ggaaaccatg gccaggctct cacctatgct gccaaattgg 360

```

aaggaattcc tgcttatatt gtggtgcccc agacagctcc agactgtaaa aaacttgcaa 420
 tacaagccta cggagcgtca attgtataact gtgaacctag tgatgagtcc agagaaaatg 480
 ttgcaaaaag agttacagaa gaaacagaag gcatcatggt acatcccaac caggagcctg 540
 cagtgatagc tggacaaggg acaattgccc tggaagtgt gaaccagggt cttttggtgg 600
 atgcactggt ggtacctgta ggtggangaa gaatgcttgc tggaatagca attacagtta 660
 aggctctgaa acctagtgtg aagggtatatg ctgctgaacc ctcaaagtca gatgactgtt 720
 ccagtccaag ctgaagggga aactgatgcc caatctttat ctttcagaac catacagatg 780
 gtgtcaaata cacattggct tgaacacctg gnctattatc anggaccttg nggatgatat 840
 ctttactg 848

<210> 3436

<211> 880

<212> DNA

<213> Homo sapiens

<400> 3436

aatgctgccc gatggccctg ggtcctcgt gtggggcaat ccgggcttgc agacgagttt 60
 tagaaagagc gttttcgcta cgtaaagcac attcgataaa ggatatggaa aatactttgc 120
 agctggtgag aaatatcata cctcctctgt ctccacaaa gcacaaaggg caagatggaa 180
 gaataggcgt agttggaggc tgtcaggagt acactggagc cccatatttt gcagcaatct 240
 cagctctcaa agtgtgacag cccaatgct gttcatgagg tggagaagtg gctgccccgg 300
 ctgcatgctc ttgtcgtagg acctggcttg ggtagagatg atgcgcttct cagaaatgtc 360
 cagggcattt tggaaagtgc aaaggccagg gacatccctg ttgtcatcga cgcggatggc 420
 ctgtggcttg tcgctcagca gccggccctc atccatggct accggaaggc tgtgctcact 480
 cccaaccacg tggagttcag cagactgtat gacgctgtgc tcagaggccc tatggacagc 540
 gatgacagcc atggatctgt gctaagactc agccaagccc tgggcaacgt gacggtggtc 600
 cagaaaggag agcgcgacat ctttcccaac ggccagcagg tgcttgtgtg cagccaggaa 660
 ggcagcancc cgcangtgtg gagggcaagg ggaccttctg tcgggcttcc tgggcgtcct 720
 ggtacactgg gcgcttcttg ctggaccaca gaaaacaaat gggtcagcc cttttctggt 780

ggcccgtttg ggcctgctn tttaccaggc antgcaacca ccaagccttt caaaagcacg 840
gtcgttcanc acaacttcga catgacccca agtggggggcc 880

<210> 3437

<211> 775

<212> DNA

<213> Homo sapiens

<400> 3437

tagccagaaa agggggcggg aagggtgta ggggtacttgt caattcgccg ccatgaacgt 60
ggtttttgct gtgaagcagt acatttccaa aatgatagag gacagcgggc ctggtatgaa 120
agtacttctc atggataaag agacgactgg catagtgagt atggatataca cacaatcgga 180
gattctacag aaggaagtgt acctctttga acgcattgat tctcaaaatc gagagatcat 240
gaaacacctg aaggcaattt gttttcttcg acctacaaag gagaatgtgg attatattat 300
tcaggagctc cgaagaccca aatacactat atatttcatt tatttcagta atgtgatcag 360
caagagtgac gtgaagtcag tggctgaagc tgatgaacag gaagtgtgg ctgaggttca 420
ggaattttat ggtgattaca ttgctgtgaa cccacatttg tttccctca atattttggg 480
ttgctgccag ggtcgaaatt gggatccagc ccagctatct agaacaactc aagggttac 540
agctctcctt ttatctctga agaagtgtcc catgattcgt tatcagctct catcagaggc 600
agcaaagaga cttgcagagt gcgttaagca agtgataact aaagaatatg aactgtttga 660
attccgtcgg acagagggtc ctncattgct ctttatttta gatcgctgtg atgatgccat 720
caccctattg ttaaccagtg gacatatcan gncatgggtc cacgaactac taggc 775

<210> 3438

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3438